Compilation de littératures scientifiques sur la massothérapie

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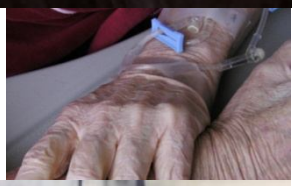
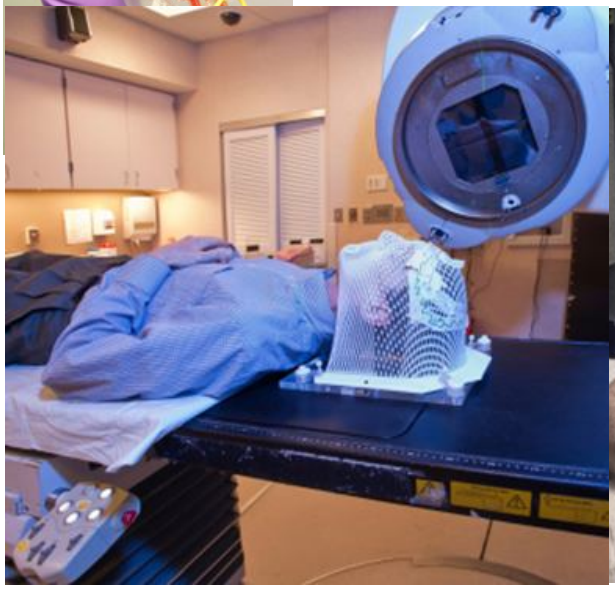
Incluant les bénéfices et les limites d'un massage

INTÉGRER LE MASSAGE DANS LE SYSTÈME DE SANTÉ AU QUÉBEC?





Présentons d'abord les sources de données employées utilisées pour compiler cette revue de littérature, initialement publiée en anglais en septembre 2013 et reprise par une association australienne et avec mention dans la prestigieuse revue *Massage Magazine*. La liste initiale des articles a été compilée en juillet 2013.

Cochrane Library – 140 articles

http://www.thecochranelibrary.com/

Nous avons effectué une recherche incluant le titre et le résumé avec les mots clés "massage" et "benefits", et après avoir examiné tous les résultats, de nombreux articles ont été supprimés en raison de leur contenu non pertinent. Les titres et les liens de chacun sont inclus dans le présent document. Au total, plus de 50 articles ont été retenus.

Medscape – 48 articles

http://www.medscape.com/

Après avoir effectué une recherche avec l'expression clé "massage therapy", tous les résultats des cinq dernières années ont été examinés, et nous avons finalement retenu 48 articles.

Pub Med – 58 articles

http://www.ncbi.nlm.nih.gov/

Nous avons effectué une recherche avec "massage therapy" et "benefits", nous avons considéré tous les résultats, et retenu 58 articles.

L'utilisation de l'anglais confère un avantage, car les bases de données consultées incluent beaucoup d'études scientifiques réalisées en anglais. Suite à la collecte de tous ces articles, nous avons procédé à l'examen et à la synthèse de chaque publication. Nous avons extrait les passages clés pour mettre en relief les arguments à l'appui, et ainsi, vous pourrez lire ces extraits sans avoir à effectuer tout le travail de recherche.

Droits réservés:

Introduction

Cette compilation se propose d'explorer les données probantes sur les avantages ainsi que sur les limites de la massothérapie (tels que documentés dans la littérature scientifique) afin que vous puissiez en arriver à une meilleure compréhension, voire à en tirer vos propres conclusions sur la question de l'intégration de la massothérapie dans le système de santé québécois.

Ce document peut également servir comme source d'informations pour un nombre croissant de personnes atteintes d'une ou de plusieurs maladies, et qui seraient intéressées par les médecines alternatives, en particulier la massothérapie.

Vous y trouverez une section sur les bienfaits du massage, avec les résultats obtenus à court terme versus ceux obtenus à long terme. Nous comparerons les différentes techniques de massage que documente la littérature et ce, en y incluant les conseils de chercheurs pour obtenir les meilleurs résultats. Nous aborderons les limites (un sujet qui reçoit moins d'attention en général) ainsi que les dangers du massage. Et en nous basant sur les études cliniques, nous découvrirons ce qui est connu sur les mécanismes à l'origine des bienfaits de la massothérapie.

Bien que la massothérapie soit l'une des approches des médecines alternatives les plus couramment utilisées, il est important que le lecteur comprenne que l'utilisation d'une approche et ses bienfaits sur la santé sont deux aspects tout à fait distincts. Afin d'illustrer cette distinction (source fréquente de confusion), examinons trois exemples, en commençant par deux anecdotes:

1) Dans des temps anciens et en saison sèche, le sacrifice d'un animal pouvait être offert aux dieux afin que ceux-ci apportent la pluie. Depuis lors, cette pratique s'est (heureusement) estompée.

2) Même aujourd'hui, en Amérique du Nord, "frapper sur du bois" est un rituel assez commun pour conforter la chance. Bien sûr, nous savons que ce rituel ne diminue pas sensiblement le risque de malchance et que son recours ne signifie pas qu'il aura quelque effet favorable.

3) Pour ce qui est de la massothérapie, si nous constatons que beaucoup de personnes retiennent les services d'un massothérapeute pour traiter ou soulager des tendinites, il est faux de conclure que le massage doit être efficace pour traiter les tendinites. Mais il serait également faux de conclure que le massage n'est pas efficace. La corrélation entre les deux doit être établie par d'autres moyens, c'est-à-dire par des études cliniques aléatoires.

Au Québec, plusieurs organisations semblent prétendre qu'on assiste à une augmentation des prescriptions par les médecins en faveur de la massothérapie et que cela signifie que les médecins s'ouvrent de plus en plus à la massothérapie. Mais attention, la logique impliquée est fausse (tout comme celle reliant le massage et le soulagement de la tendinite). Est-il possible que les compagnies d'assurances tentent de diminuer l'incidence de fraudes (depuis la crise financière en 2008) en exigeant une prescription médicale et que les assurés consultent les médecins pour obtenir une prescription?

Nous n'avons pas accès au nombre élevé d'ordonnances émises au Québec en faveur de la massothérapie, celles-ci ne sont pas comptabilisées par les pharmaciens. Ce sont principalement les compagnies d'assurances qui documenteraient ces données. Et il serait peu commun qu'un assuré réclame une

ordonnance médicale pour un massage si celui-ci n'était pas requis par sa police d'assurance, et l'agent d'indemnisation n'aurait aucun intérêt à ajouter des notes non pertinentes au dossier de l'assuré.

Définir la massothérapie

Définir la massothérapie s'avère être un assez grand défi, car elle est variée et multidimensionnelle. Par exemple, il existe de nombreuses variétés de massage: suédois, californien, shiatsu, massage de polarité, et des centaines d'autres. Évidemment, beaucoup de massothérapeutes ont appris plus d'une technique et combinent leurs connaissances pour offrir un service professionnel des plus personnalisé. De plus, il ne faut pas oublier que les études sur le sujet ont été réalisées dans différentes régions, les exigences en terme de formation pouvant varier selon la réglementation en vigueur d'une région à une autre.

Fait intéressant: on rapporte souvent que la variable la plus importante pour les étudiants lorsqu'ils choisissent un programme de formation en massage, c'est l'enseignant plutôt que l'école.

Abordons maintenant les diverses définitions rencontrées dans la littérature scientifique:

- L'*American Massage Therapy Association* (AMTA) définit le massage comme suit: "Manipulation douce de la peau, incluant la retenue, causant du mouvement et/ou appliquant de la pression sur le corps"[1].
    - Cette définition est très large et inclut des procédés dans la pratique clinique, par exemple le massage du nerf optique ou le massage cardiaque. Mais cette définition n'est pas pertinente aux fins de cette compilation sur la massothérapie.
- Un autre article définit le massage comme suit: "Une forme systématique de stimulation tactile et kinesthésique"[2].
- Et un autre article définit cette fois-ci le massage comme suit: "La manipulation de la peau par une personne sur une autre, dans le but d'améliorer la santé et le bien-être"[3].
- La classification nationale des professions (CNP) est un système utilisé par le gouvernement du Canada pour classifier les emplois. En 2011 on y voit l'ajout du code CNP 3236, massothérapeute. La définie est la suivante[4] :
    - Les massothérapeutes évaluent le tissu mou et les articulations du corps en vue de traiter et de prévenir les dysfonctionnements, les blessures, les douleurs et les troubles physiques.

Mais il faut aussi considérer les variantes propres à chaque type de massage. Le massage shiatsu inclut principalement des pressions, des rotations et des étirements de la peau du client vêtu, non huilé et

[1] Texte original de l'AMTA : "Manual soft tissue manipulation, [including] holding, causing movement, and/or applying pressure to the body".
[2] "A form of systematic tactile and kinesthetic stimulation".
[3] "The manual manipulation of soft tissue, performed by a person other than the recipient, intended to promote health and well-being".
[4] http://www.soinspersonnels.com/documents/MA-Etudedepertinence-web.pdf

étendu au sol sur un matelas. Le massage suédois inclut principalement l'effleurage, le pétrissage et le frottement de la peau du client (peu vêtu et huilé), des tapotements, des compressions, des vibrations.

Quelle conclusion tirer de toutes ces définitions? Malgré que nous sachions tous ce qu'est un massage, aucune de ces définitions n'est suffisamment précise pour être utilisée universellement.

La massothérapie demeure donc comprise, mais non définie. Cela rendra plus complexe la comparaison des essais cliniques, sans parler de la difficulté, voire l'impossibilité de créer un massage placebo pour des expérimentations cliniques aléatoires.

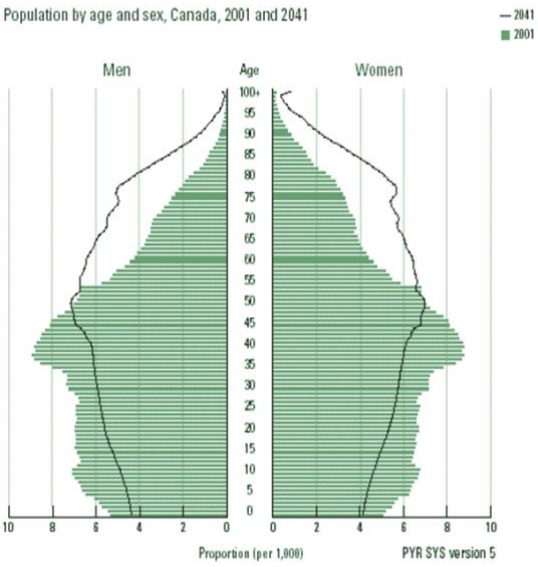
Dans les études cliniques scientifiques, le massage peut inclure un seul ou de multiples traitements dont la durée peut varier de quelques jours à quelques semaines, et même des mois pour les études qui tentent d'évaluer les effets à long terme.

On peut se donner soi-même un massage ou se le faire donner par une autre personne. Et il faut aussi considérer la qualité de vie des participants (on doit se fier à la sélection des chercheurs) en tenant compte de différents aspects (physiques, mentaux, émotionnels, sociaux, voire spirituels). Toute personne se situe à un point différent sur le spectre de chacun de ses aspects. Par conséquent, les résultats mesurés à partir d'un même type de massage sur différents clients diffèreront en fonction de ces aspects. Mais toutes ces variables sont théoriquement minimisées, voire s'annulent lorsque l'étude repose sur un échantillon d'une assez grande taille.

Un dernier niveau de complexité tient au fait que la massothérapie est intrinsèquement multidimensionnelle et que les conclusions qu'on peut tirer de son étude reposent sur trois autres grandes catégories de données que l'on peut recueillir:

1) Les données affectives primaires (sentiments, émotions).
2) Les données physiologiques (réactions organiques).
3) Les données comportementales (réponses observables).

Démographie



Si nous désirons mieux comprendre l'évaluation et le rôle de la massothérapie en milieu clinique ou en milieu hospitalier au Québec, une compréhension de base de la démographie canadienne y contribuera.

La concentration de la population canadienne, prise par tranche d'âge, se centre dans la catégorie des 30 à 55 ans. Nous savons que l'espérance de vie augmente depuis plusieurs décennies, même si l'on spécule que la nouvelle génération actuelle vivra moins longtemps que celle de ses parents.

Il existe une corrélation connue entre l'âge et la consommation de médicaments sur ordonnance, la démence, la maladie d'Alzheimer, l'incidence du cancer, etc.: ce sont là des choses liées au vieillissement des cellules dans le corps ou la diminution de leur capacité à se régénérer rapidement. Les équipements d'imagerie médicale modernes et le développement technologique des outils de diagnostic feront donc probablement faire augmenter le nombre de cas signalés de maladies, et faire augmenter le nombre de personnes diagnostiquées.

D'où une belle place, dans certains cas, pour les médecines alternatives, surtout en leur qualité de médecines préventives où les clients jouent un rôle actif. L'une des enquêtes a montré que jusqu'à 20% des patients atteints de cancer ont recours à la massothérapie.[5]

La massothérapie sera-t-elle intégrée dans le secteur hospitalier québécois?

Cette question, éminemment politique, dépend en grande partie du fait que la massothérapie peut générer des économies plutôt que des frais supplémentaires au système de santé, que ce soit sur les plans de l'appareillage, de l'espace requis ou des frais généraux (notamment des salaires).

Étant donné qu'il est bien établi que l'intégration de multiples types de soins de santé (médecines alternatives) est bénéfique pour la santé du patient, la question de savoir si le Québec devrait intégrer la massothérapie dans son secteur hospitalier est évidemment **la mauvaise question** et ce, pour plusieurs raisons.

C'est notamment une question qui démontre une certaine myopie et qui ignore la place réelle qu'occupe le massage dans le spectre des médecines alternatives complémentaires. Aux fins de ce document, nous prendrons à part la massothérapie et l'évaluerons sans considérer les autres approches thérapeutiques. Une question plus appropriée à poser serait la suivante: "Laquelle des approches thérapeutiques complémentaires serait la plus profitable pour les patients dans les hôpitaux, dépendamment des maladies et des conditions, et à quels coûts?"

Nous présentons maintenant une liste sommaire des différentes approches ou médecines alternatives complémentaires, sans toutefois prétendre que cette liste soit complète et exhaustive. Nous présentons cette liste pour montrer que considérer isolément la massothérapie serait une erreur évidente, un manque de jugement. Voici donc quelques exemples d'approches ou de techniques thérapeutiques que l'on retrouve dans les revues de littératures scientifiques (l'ordre d'apparition n'a aucune importance particulière):

[5] Voir l'article n° 25 : *Integrative Oncology: Complementary Therapies in Cancer Care*.

- La stimulation nerveuse électrique transcutanée.
- L'exercice physique.
- Les exercices aérobiques.
- Le conditionnement physique.
- Les techniques de manipulation chiropratique.
- Les manipulations vertébrales.
- La manipulation ostéopathique.
- La relaxation.
- Les exercices de respiration.
- La technique de réduction du stress par la pleine conscience.
- L'hypnose.
- La psychothérapie.
- L'acupuncture.
- La thérapie corps-esprit.
- La thérapie magnétique.
- La saine alimentation.
- L'hygiène du sommeil.
- Le biofeedback.
- L'approche des points de détente.
- L'approche Trager MD.
- Les traitements par effets botaniques.
- La gestion du stress.
- Les suppléments vitaminiques.
- Les produits naturels.
- Les suppléments minéraux.
- Les suppléments d'herbes.
- Les suppléments diététiques.
- Les antioxydants.
- La prière.
- La guérison spirituelle.
- Le toucher thérapeutique.
- Les exercices d'étirement.
- L'entraînement en résistance.
- Les thérapies reposant sur le chaud ou le froid, l'utilisation de compresses.
- L'électrothérapie.
- Les voix apaisantes.
- La respiration profonde.
- L'humour.
- Le toucher thérapeutique.
- Les soins axés sur le toucher.
- Les ultrasons.
- La lasérothérapie.
- Les thérapies par le groupe.
- Le coaching de vie.
- L'éducation du patient.
- La conservation de l'énergie.
- Les thérapies énergétiques.
- L'alimentation saine et l'hydratation.
- La thérapie craniosacrale.
- La technique Bowen.
- Le reiki.
- Le yoga.
- La méditation.
- Les bains de pied.
- La réflexologie.
- La visualisation.
- L'iridologie.
- La thérapie par la musique.
- L'aromathérapie.
- Les huiles essentielles.
- Les remèdes floraux du docteur Bach.
- La thérapie cognitivo-comportementale.
- L'homéopathie.
- La luminothérapie
- L'éducation.
- La naturopathie.
- La technique Alexander.

En l'absence de règlementation provinciale ou de regroupements significatifs (selon la perspective), plusieurs types de médecines alternatives cherchent à se faire reconnaître à titre d'ordres professionnels par le gouvernement du Québec. Ces médecines alternatives incluent (sans y être limitées) des regroupements de naturopathes, d'homéopathes et de massothérapeutes. Certains de ceux-ci déclarent publiquement que les médecins ont peur de perdre leur emploi devant la popularité croissante des médecines alternatives.

En s'appuyant sur cette compilation d'études scientifiques, l'AQTN peut prétendre que cette peur est erronée et ce, en suivant un raisonnement particulier. Ce n'est pas que les médecines alternatives soient moins bonnes que la médecine conventionnelle – avons-nous un volontaire pour une chirurgie cardiaque pratiquée par un homéopathe? –, mais plutôt parce que le changement le plus important requis pour que notre société soit en meilleure santé se situe en dehors du champ de pratique des médecins, des fournisseurs de soins et des thérapeutes, et même du gouvernement.

Toutefois, dans le cadre de la relation entre clients et thérapeutes, ceux-ci sont très bien placés pour formuler des conseils adaptés qui conduiront à une meilleure santé et ce, en dirigeant les clients vers de simples changements de vie, pas nécessairement par le recours à un enseignement ou à une éducation quelconque qu'on voudrait imposer aux clients, mais par l'établissement d'un partenariat avec ceux-ci.

Changer notre mode de vie

Ni le gouvernement, ni la médecine occidentale ou orientale, ni les médecins, ni les physiothérapeutes ne peuvent nous obliger, vous et moi, à faire de l'exercice, à manger sainement et à prendre le temps nécessaire pour nous détendre. On peut nous y inciter, certes, mais un changement de mode de vie est un choix personnel, et c'est là où l'on retrouve la question clé pour une société en meilleure santé: faut-il éduquer le public? Non, parce que pour l'essentiel, l'éducation n'est pas ce qui manque. Pour parler en mots simples, l'éducation n'est pas la clé parce que le public est déjà éduqué. La question que nous devons plutôt nous poser tient en ceci: que doit faire notre société obtenir des changements dans le mode de vie de sa population, étant donné que tout ce qui a déjà été fait pour les obtenir semble avoir eu des résultats limités?

Tout d'abord, établissons le concept de métacognition: être conscient d'être conscient de quelque chose. Le concept est extrêmement simple, et c'est la première étape vers l'action et le changement de nos comportements.

Retenons la métaphore de la lampe de poche dans l'obscurité. À tout moment, on ne peut voir qu'une petite partie de ce qui nous entoure – on ne peut pas tout voir, et il en est de même pour la conscience –, et notre attention étant donc concentrée sur un point, nous ne voyons pas le reste. Toutefois, le contrôle de l'attention est une habileté qui peut être cultivée et améliorée avec de la pratique (tout comme le massage).

Lorsque nous devenons conscients de nos choix et de nos actions, nous pouvons plus facilement les modeler de manière à mieux vivre notre vie. La métacognition de votre posture actuelle ou celle de votre liste d'épicerie sont des exemples concrets.

Alors, si c'est aussi facile, comment pouvons-nous expliquer tous les mauvais choix que nous faisons tous? L'AQTN propose une théorie basée sur un argument rationnel, laquelle théorie ne pouvant être considérée comme rien de plus qu'une opinion de l'AQTN. Et nous supposons que vous, le lecteur, en conviendrez.

Nous effectuons régulièrement de mauvais choix pour essentiellement deux raisons:

1) Par manque de métacognition.

2) Par rationalisation de nos choix (c'est la raison la plus fréquente).

La distance conceptuelle

Lorsque les comportements qu'on adopte ne peuvent être liés à des résultats rapides, il devient plus facile de faire de mauvais choix, de prendre de mauvaises décisions.

En éliminant la cigarette, les boissons gazeuses, les gâteaux, la crème glacée, la pizza, les beignes, les jus sucrés, le sucre et la crème dans le café, etc., on ne voit pas nécessairement les résultats positifs immédiatement: il y a une distance conceptuelle entre les choses malsaines qu'on élimine et les résultats attendus.

Le même phénomène s'applique aux saines habitudes qu'on intègre dans sa vie: la méditation, les exercices physiques ou mentaux quotidiens, se coucher à la même heure tous les jours, s'appliquer de la crème solaire lorsqu'on va au soleil, mener des activités quotidiennes pour limiter ou réduire le stress et l'anxiété, etc., on ne voit pas nécessairement les résultats positifs immédiatement.

Nous sommes tous déjà éduqués; l'éducation n'est pas le problème.

Il est facile de minimiser les conséquences de l'ingurgitation d'un gâteau d'anniversaire alors qu'on vit dans des villes bondées de voitures polluantes. À quoi bon s'empêcher de boire une canette de boisson gazeuse quand on sait qu'une personne sur cinq souffre de dépression à un moment ou à un autre de sa vie et qu'elle prend des médicaments sur ordonnance?

Nous choisissons la gratification instantanée plutôt que le sacrifice pour notre propre bien-être. La justification ultime de toute rationalisation de nos mauvais choix tient au dicton "On ne vit qu'une seule fois". C'est une justification tout à fait compréhensible et valable. En fait, pour mener une vie normale et

être conscients de nos décisions, nous **devons** autojustifier nos mauvais choix pour maintenir notre équilibre mental.

Si nous nous retrouvions en permanence à poser de mauvais choix et à en être conscients, sans les justifier intérieurement, nous éprouverions de graves problèmes: culpabilité, manque de confiance et faible estime de soi, sentiments de manque de contrôle dans notre propre vie, etc., et ce, **chaque fois** que nous prendrions une décision présumément mauvaise ou controversée (par exemple: commander une pizza). Poser de mauvais choix non avalisés par nous-mêmes entraîne des conséquences pour notre psyché, nos émotions et notre corps.

Nous pouvons blâmer la publicité, les lois permettant la vente de certains aliments ou le fait que nos achats se limitent essentiellement à ceux offerts dans les épiceries, etc. Ce sont là tous des exemples de rationalisation et de déresponsabilisation.

Alors, d'où proviennent les préférences des consommateurs? Elles proviennent de différentes variables, par exemple les prix, les tactiques de marketing, les nouveautés, les innovations… Prenons un exemple simple: si les dépanneurs vendent des cigarettes, c'est tout simplement parce que les gens en achètent. C'est un choix personnel.

Il est clair que l'éducation est importante pour faire de bons choix lorsque nous voulons changer notre mode de vie, mais aujourd'hui, nos choix et leurs conséquences sur chacun de nous ne sont qu'à quelques clics de souris sur Internet. Les problèmes de santé que connaît l'Amérique du Nord ne peuvent être corrigés que par chacun de nous.

Similairement, pour combattre la violence dans notre société, l'éducation, la disponibilité des emplois et les liens familiaux peuvent tous contribuer à réduire la violence, mais chaque acte criminel est un choix de vie (souvent) momentané qu'un individu décide consciemment de poser. Rappelons-nous la métaphore de la lampe de poche.

Qui financera les massages dans les hôpitaux?

L'intégration de la massothérapie dans le système de santé québécois exigerait la coopération et l'approbation des médecins et des autres professionnels de la santé du Québec. Nous savons que de nombreux médecins recommandent déjà la massothérapie. La variable à considérer, c'est le financement: qui payera pour les soins prodigués par les massothérapeutes et quelles en seront les répercussions? Sans une boule de cristal, c'est plutôt difficile, et même impossible à prévoir. Mais il semble exister différentes options. Et pour les gens créatifs, il pourrait même en avoir d'autres, voyons ces options:

1) Le gouvernement québécois

Le gouvernement ne semble pas être en position d'augmenter ses dépenses pour défrayer les frais de massothérapie pour des patients hospitalisés, en CLSC, etc., et surtout pas à des tarifs à la hauteur (par exemple) de 65$ l'heure que l'on voit dans le secteur privé. Les hôpitaux au Québec ont déjà du mal à retenir à leur poste leurs infirmiers, médecins et autres membres du personnel.

Le gouvernement a d'autres problèmes budgétaires à régler, par exemple ceux liés aux infrastructures routières ou au déficit.

Mais supposons que le gouvernement consentirait un tarif horaire aux massothérapeutes, de combien serait-il? Sachant que la durée d'un programme de massothérapie oscille entre 4 et 12 mois, une durée comparable au temps de formation d'un préposé aux bénéficiaires, le salaire versé oscillerait entre 15$ et 22$ l'heure[6]. Donc, si le gouvernement créait des milliers d'emplois à 18$ l'heure, cela aurait sans doute un effet sur le coût d'un massage dans le secteur privé.

2) La CSST pourrait payer

Si la prestation de soins de massothérapie était rentable, on peut présumer qu'ils seraient déjà remboursés. On peut aussi supposer que la physiothérapie démontre de meilleurs résultats dans la plupart des cas, une technique qui sera comparée à la massothérapie (selon les études recensées dans la littérature) plus loin. On sait toutefois qu'une des conditions d'admissibilité à un remboursement de la CSST, c'est que le praticien impliqué doit appartenir à un ordre professionnel (une appartenance obligée pour qu'un professionnel soit reconnu légalement). Cela ouvre la porte à l'argument suivant: pour que "la massothérapie [soit] rentable, il faudrait tout simplement qu'un ordre professionnel soit institué pour les massothérapeutes"; ce qui est problématique (comme nous le verrons d'ailleurs au n° 7 ci-dessous).

3) Le financement des organismes sans but lucratif – Il est peu probable que ce financement puisse atteindre des proportions significatives et durables.

4) Les dons et la collecte de fonds pourraient être une solution viable – Il est aussi fort peu probable que les dons et fonds recueillis puissent atteindre des proportions significatives et durables.

5) Le secteur privé – Il existe déjà. Il n'y a essentiellement aucune barrière entre un massothérapeute prêt à offrir ses services à un client, sauf l'argent dont dispose celui-ci et la proximité de celui-là. Si l'on peut se permettre un massage à 65$ l'heure par jour, l'option est là. Le problème, c'est que la plupart des personnes atteintes de cancer ou d'autres maladies ne peuvent pas se le permettre. En

[6] http://en.wikipedia.org/wiki/Opportunity_cost

fait, selon le revenu moyen par ménage, la majorité des familles québécoises ne peuvent non plus se le permettre.

6) Le bénévolat – Cela élude toute la question de savoir qui paiera, et il ne manque pas d'occasions d'en faire (du bénévolat). Nous devons féliciter ceux qui consacrent leur temps à aider les malades. Plusieurs membres de l'AQTN font déjà activement du bénévolat dans la région de Montréal, une activité des plus bienfaitrice et épanouissante.

7) Les compagnies d'assurances – Elles pourraient payer. En fait, de nombreuses polices d'assurance remboursent déjà les frais de massothérapie. Les compagnies d'assurance existent (entre autres) pour faire des profits, et cela leur rapporte d'avoir des assurés en bonne santé. Par conséquent, si les bienfaits de la massothérapie sur la santé faisaient en sorte de réduire, à court ou à long terme, les coûts liés à l'invalidité, les traitements de massothérapie seraient déjà plus répandus, et même exigés par les compagnies d'assurance. Mais en réalité, ce n'est pas le cas, ce qui nous indique que les assureurs jugent que les coûts pour des séances de massothérapie ne leur font pas économiser d'argent. Et cela implique que le secteur hospitalier, lui aussi, ne bénéficierait probablement pas d'économies d'échelle.

8) Nous pourrions former nos infirmières à effectuer des massages thérapeutiques d'une durée moyenne de vingt minutes, une durée généralement considérée comme optimale pour obtenir la gamme de bienfaits que procure habituellement le massage, et cela a déjà été fait dans différents hôpitaux. Les infirmiers maîtrisent déjà l'anatomie, doivent respecter un code de déontologie, peuvent tenir des dossiers médicaux appropriés, et ont déjà établi des relations professionnelles privilégiées avec leurs patients. Selon les expériences déjà effectuées, la formation requise serait minime, et une logique semblable s'applique aussi, dans une moindre mesure, aux préposés aux bénéficiaires.

Lorsque la massothérapie est combinée avec l'éducation individualisée, et en particulier avec l'exercice physique, elle est très, très efficace et ce, en raison du mode de vie qui l'accompagne. C'est presque un remède miraculeux préventif: moins d'obésité conduit à moins de diabétiques, un corps en santé implique une incidence moindre de problèmes cardiaques, moins de stress et de solitude conduit à moins de dépression, et de meilleurs sommeils fait souvent en sorte que les personnes affichent meilleure humeur, qu'elles ont l'esprit plus vif, etc.

Toutefois, une fois qu'une personne est atteinte de diabète, qu'elle souffre de problèmes cardiaques, de cancer, de dépression chronique ou de sommeils gravement perturbés, le massage n'aide pas vraiment; il est trop tard. Et même une personne en dépression chronique ne peut pas profiter de massages, car elle ne peut pas (eu égard à la définition de dépression clinique) quitter sa résidence.

L'argument voulant que la massothérapie aide à guérir significativement les patients atteints de maladies graves dans les hôpitaux semble donc ne pas être fondé.

La massothérapie ne semble donc pas être en mesure de réduire les coûts d'hospitalisation. Dans la littérature, on retrouve toutefois un effet prometteur: la durée réduite du séjour à l'hôpital pour les enfants. Mais sur ce point, il faut remarquer que les massages sont souvent donnés par les mères elles-mêmes, lesquelles n'ont généralement aucune formation en massothérapie.

Dans la suite du texte de cette compilation d'études cliniques, la discussion sera plus positive, consacrée à explorer les avantages de la massothérapie.

Le lecteur avide notera quelques contradictions dans les conclusions des études littéraires, et c'est normal d'en trouver. Le pilier sur lequel s'appuie la médecine moderne tient à la reproduction d'essais cliniques avec des résultats similaires: plus ces essais sont nombreux, plus les résultats gagnent en crédibilité. Une fois que les bienfaits s'accumulent pour un traitement donné dans des conditions données, le traitement prend sa place dans les "meilleures pratiques". À titre d'exemple, il est donc normal que certaines études démontrent une amélioration significative, sous certaines conditions, du taux de cortisol, alors que sous d'autres conditions, on n'observe aucun changement significatif.

Avantages à court terme et à long terme

LES MALADIES RHUMATISMALES

- Les articles indiquent qu'il y aurait généralement des bienfaits à court terme pour les maladies rhumatismales, et même à long terme selon certaines études.
- Une heure de massage suédois durant 4 semaines procure des bienfaits jusqu'à 8 semaines après ces 4 semaines.

ANXIÉTÉ, RELAXATION, STRESS

- La réduction de l'anxiété est le bienfait à long terme le plus couramment rapporté.
- Les articles de la littérature indiquent qu'à court terme, le massage réduit le stress.
- À long terme, le massage a des bienfaits sur l'anxiété.
- La relaxation qu'apporte un massage se maintient durant au moins 16 à 18 heures.

DOULEUR

- Les douleurs chroniques ou musculo-squelettiques sont apaisées jusqu'à une semaine après un massage, mais moins durablement après 4 semaines.

- Une autre étude sur les maux de dos montre des bienfaits durant au moins 6 mois.

AUTRES

- Un massage bihebdomadaire (durant 5 semaines) du dos et du cou durant 30 minutes montre une réduction substantielle de la fatigue durant 6 semaines de plus.
- Des personnes âgées recevant des massages durant 6 semaines verront rapidement et à long terme s'améliorer leur stabilité posturale et leur pression sanguine.
- Des séances de massothérapie d'une durée 20 minutes financées par l'employeur n'ont démontré aucun effet à long terme.
- Le massage suédois ou léger montre une réduction de symptômes jusqu'à 48 heures après qu'il eut été donné (selon une étude oncologique).

Si l'on combine l'ensemble des résultats et considérant une période de plus de 6 mois, il est clair qu'il n'y a aucun bénéfice à long terme. Il semble assez évident que les massages n'offrent pas d'avantages à long terme, à moins qu'ils soient accompagnés de changements dans la vie de ceux qui les reçoivent.

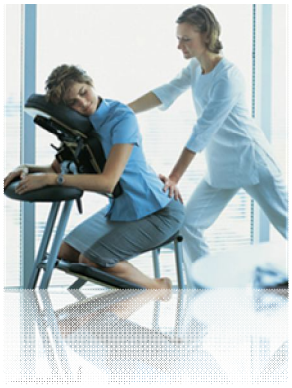
Cela signifie donc que pour des résultats durables, le massage devrait faire partie d'une routine, qu'il devrait être intégré dans le mode de vie comme activité régulière.

Considérations particulières

Nous avons déjà vu que la massothérapie est multidimensionnelle; or, voici d'autres considérations que nous n'avons pas encore soulignées: la durée du traitement, le lieu d'application du massage, l'intensité et l'impact psychologique du massage (en se référant à la relation thérapeute/client). Il y a aussi les questions entourant la qualification du thérapeute, ses compétences, son expérience. Voici quelques recommandations recensées dans la littérature:

- La fréquence optimale pour l'arthrose du genou est d'une heure de massage par semaine.
- Le massage devrait être sans douleur.
- L'intensité du massage devrait augmenter graduellement.
- Une pression modérée est toujours meilleure qu'une pression légère. Une pression modérée est nécessaire pour obtenir les effets thérapeutiques du massage.
- La réponse physiologique du muscle dépend du type de pression appliquée durant le massage.
- L'effet le plus significatif apparaît 15 minutes après le massage (d'après un article traitant de la douleur arthrosique métastasique).

Les bienfaits démontrés du massage



La massothérapie, dans bien des cas, entraîne un effet boule de neige des plus bénéfique sur la santé des gens. Par exemple, un sommeil plus long et de meilleure qualité favorise la guérison et réduit l'anxiété. Et avoir une meilleure humeur favorise la sociabilité et l'intégration sociale, augmentant ainsi le sentiment d'appartenance, ce qui favorise à son tour des sommeils de qualité, un élément important qui mérite toute notre attention dans la guérison. Tout cela rendra les prochains massages encore plus thérapeutiques, car le client sera encore plus réceptif et ce, jusqu'à ce que la limite des bienfaits de la massothérapie soit atteinte: un plateau qui peut être maintenu.

Mais les bienfaits du massage sur la santé sont-ils hors de proportion ou sont-ils sous-estimés?

La publicité typique d'un massothérapeute prétend souvent "pouvoir réduire la tension musculaire" ou "améliorer la circulation sanguine". Ce sont de véritables effets physiologiques du massage, mais on peut aussi réduire la tension musculaire en se couchant sur une surface plane (par exemple un simple lit) et en fermant ses yeux. La circulation sanguine peut être améliorée par une courte promenade au grand air. Et en ce qui concerne les muscles endoloris, plusieurs études démontrent que simplement effectuer un doux exercice – et qui plus est, ça ne coûte rien! – offrira de meilleurs résultats qu'un massage.

Si par malchance, vous êtes frappé d'une incapacité (de marcher, par exemple), peut-être qu'un massage n'est pas la meilleure solution pour vous, si on exclut bien entendu le confort qu'il peut vous apporter. Comme nous verrons, la massothérapie offre beaucoup d'avantages que l'on voit moins fréquemment annoncés; en voici des exemples tirés d'études scientifiques:

- Le massage peut être bénéfique aux personnes atteintes de SIDA/VIH lorsqu'il est combiné avec d'autres techniques comme la méditation et les exercices de relaxation.
- Pour réduire l'anxiété, la douleur ou les nausées, améliorer la qualité du sommeil et de la vie en général, donner 30 minutes de massage durant 3 semaines consécutives est amplement suffisant.
- Le massage soulage généralement les maux et douleurs, spécialement les patients retenus au lit ou à mobilité limitée.
- Le massage améliore la qualité du sommeil: il en réduit les perturbations et améliore son pouvoir réparateur.

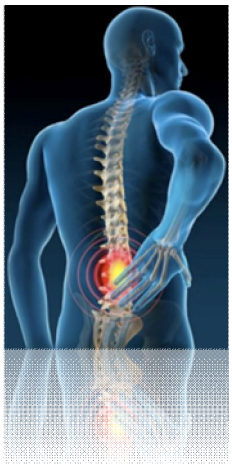
- Pour une personne atteinte de sclérodermie, le massage du tissu conjonctif combiné avec la manipulation des articulations contribue à améliorer la fermeture du poing, le mouvement et les fonctions de la main, et la qualité de vie en général. Cependant, la fermeture du poing s'est aussi améliorée pour le groupe témoin dans l'étude concernée.
- Administré après une transplantation de moelle osseuse, le massage réduit les effets de la chimiothérapie et de l'irradiation (pour les femmes atteintes d'un cancer du sein), il réduit la dépression, les accès de colère, la dépression, la nausée, la fatigue, l'anxiété et la douleur, et il améliore l'humeur.
- Le massage favorise le soulagement et la tolérance à la douleur durant les contractions utérines d'une femme en voie d'accoucher (quoique l'immersion dans l'eau, la relation et l'acupuncture en font autant), mais l'étude concernée repose sur un échantillonnage restreint.
- La relaxation pour prévenir la fatigue prématurée. Il existe des preuves voulant que les thérapies touchant corps et esprit (méditation, massage, yoga, réflexologie, exercices de respiration, visualisation, musicothérapie et aromathérapie) soient efficaces.
- Le massage (une excellente thérapie non invasive) atténue l'accumulation nerveuse de graisse chez les nouveaux-nés masculins. Il réduit aussi les problèmes métaboliques chez les prématurés à mesure qu'ils vieillissent.
- Le massage peut réduire le séjour à l'hôpital des prématurés.
- Le massage peut réduire la douleur, la raideur et améliorer la stabilité fonctionnelle du genou atteint d'arthrose.
- Le massage est efficace pour réduire la tension postérieure des épaules (mais moins efficace chez les patients qui en souffrent depuis une assez longue période).
- Le massage atténue le syndrome du sevrage néonatal.
- Le massage est souvent plus efficace que bien d'autres traitements pour la fibromyalgie.
- Le massage peut aider les personnes souffrant d'un trouble de l'alimentation, par exemple d'anorexie mentale, de désordre alimentaire complexe.

La douleur et la massothérapie

La douleur est une variable subjective, une expérience individuelle, très complexe et peu comprise par la communauté scientifique. Les recherches sur la génétique ont permis de découvrir qu'une

prédisposition à certaines conditions de douleur peut être héréditaire, par exemple la migraine ou la fibromyalgie. Chaque personne présente une réponse différente à la douleur.

La douleur aiguë est immédiate, grave et de courte durée, tandis que la douleur chronique est d'une durée prolongée. En général, plus on passe de temps avec une douleur chronique, plus il faudra de séances de massage pour se défaire de cette douleur chronique, et cela est d'autant plus important que le client peut modifier certains aspects de son mode de vie (idéalement ceux à l'origine de la douleur).



Il y a aussi la douleur psychique, comme après la perte soudaine d'un emploi, un décès dans la famille, la douleur causée par une véritable dépression (au sens clinique du terme) ou à la suite d'une catastrophe dévastatrice.

La douleur fonctionne comme un signal d'alarme que notre corps nous envoie. On pourrait la qualifier comme une forme de métacognition automatique nous disant "attention". La douleur du subconscient prend le contrôle de la conscience pour nous intimer de faire quelque chose (c'est-à-dire d'agir): par exemple, prendre un analgésique pour un mal de tête ou retirer notre main d'une poêle brûlante.

Selon les études scientifiques compilées, les douleurs les plus couramment traitées avec la massothérapie concernent le dos, le cou, le genou et l'épaule. La littérature sur les nombreuses études scientifiques suggère que le massage n'est pas efficace pour les douleurs lombaires aiguës. Cependant, pour les douleurs de dos chroniques, les avantages peuvent durer jusqu'à 6 mois! Mais aucune différence clinique significative n'a été démontrée entre la relaxation et la massothérapie structurelle en termes de soulagement des symptômes.

Le mal de dos est l'une des affections de santé les plus répandues en Amérique du Nord: il est supposément la deuxième raison la plus fréquemment invoquée pour manquer une journée de travail et la première raison invoquée pour justifier l'invalidité.

Par conséquent, en recourant à la massothérapie, la réduction des conséquences négatives et des coûts liés aux maux de dos sur l'économie pourrait être énorme.

Les quatre revues de la littérature compilées à ce jour par l'AQTN[7] citent toutes un certain degré d'efficacité de la massothérapie sur la douleur, ce qui cadre avec une observation des plus intéressante: dans leur ensemble, les médecines alternatives sont toutes efficaces dans des conditions comparables, et même que dans une certaine mesure, leurs avantages se superposent. Afin de comprendre pourquoi le soulagement de la douleur est aussi fréquemment cité, nous devons d'abord comprendre ce qu'est la douleur.

[7] Réflexologie, homéopathie, médecines traditionnelles chinoises et massothérapie.

Commençons par une liste des dix principales causes de douleur (les lignes en caractères gras illustrent les causes pour lesquelles, selon la littérature scientifique compilée par l'AQTN, les médecines alternatives, pour la plupart, apportent des bienfaits):

1. L'accouchement non médicamenté.
2. Les démangeaisons vives (avec tendance irrésistible à s'écorcher la peau).
3. Le zona.
4. **Les douleurs cancéreuses (notamment les douleurs osseuses).**
5. Les maux de tête à répétition et la névralgie du trijumeau.
6. Les calculs rénaux.
7. **Les rhumatismes arthritiques.**
8. **La migraine.**
9. **La dépression (douleur psychique).**
10. **La fibromyalgie.**

Pour compléter notre compréhension de la douleur, nous nous tournons vers le docteur Kelly, un psychologue qui enseigne des techniques de méditation pour des personnes souffrant de douleurs chroniques. Le docteur Kelly a géré une clinique de la douleur et estime que l'élément le plus important dans la lutte contre la douleur chronique ne tient pas aux médicaments ou à la technologie, mais à la présence et à la compassion d'un thérapeute. Le docteur Kelly a officié durant onze ans en tant que directeur d'une clinique de stress, de douleurs et de maladies chroniques[8] au Toronto Hospital (en Ontario).

Son approche considère la douleur comme comportant trois niveaux: (1) sensoriel, (2) cognitif et (3) affectif ou émotionnel. Ses cours de méditation aident les gens à faire la distinction entre ces trois niveaux et d'en acquérir un certain contrôle. Suite à sa longue carrière de chercheur chevronné sur la douleur, il opine que les thérapies les plus efficaces le sont lorsque les patients assument leur part de responsabilités (lire: lorsque ceux-ci changent leur mode de vie)[9].

Selon le docteur Kelly, 15% des résultats sont attribuables à la technique thérapeutique et 30% à la relation thérapeute/client. Ces pourcentages ne sont pas scientifiques, mais on peut aisément en conclure que la relation de confiance est, grosso modo, deux fois plus importante que le traitement. De plus, même en additionnant ces pourcentages, leur somme (45%) signifie donc qu'ensemble, la technique thérapeutique et la relation thérapeute/client ont un peu moins de poids sur l'apaisement de la douleur que l'ensemble des autres causes, y compris notamment le rôle du patient lorsqu'il n'est pas en période de thérapie. Rappelons aussi que l'approche du docteur Kelly repose sur la méditation et non pas sur le massage, et donc que l'inférence n'est pas directe.

Considérons un autre fait important: la douleur ne peut pas être mesurée scientifiquement avec des appareils ou des tests (sanguin, d'urine, etc.). On n'y arrive donc que par des questionnaires ou des

[8] *Stress, pain and chronic – disease clinic*.
[9] Marni Jackson, *Pain: The Science and Culture of Why We Hurt*, ISBN 0-679-31190-4.

techniques douteuses (par exemple le nombre de secondes qu'un participant peut conserver sa main dans de l'eau extrêmement froide avant de le retirer).

Malgré que l'AQTN n'ait pas trouvé d'articles suggérant que les participants des études cliniques exagéraient lorsqu'ils ont rempli leur questionnaire sur la douleur (*McGill Pain Questionnaire*, BPI, IPP ou autres[10]), il est probablement arrivé que de temps à autre, ils aient dû exagérer. En effet, comme les participants comprennent les implications de leurs réponses et étant donné le sentiment général de bien-être qu'offre un massage, il y a lieu de croire que les participants puissent avoir été socialement incités à exagérer un peu et à avoir faire preuve d'un sens altruiste du devoir civique.

En fournissant aux chercheurs des résultats légèrement exagérés, les participants contribuent probablement ainsi à faire augmenter l'usage du massage ou à prolonger leur participation dans l'étude clinique, partageant ainsi l'expérience avec des étrangers. Sachant déjà que la douleur est subjective, les participants ne peuvent pas être pris en faute si l'exagération est raisonnable.

Il existe des tas d'ouvrages traitant de l'honnêteté et de tels comportements. Certains ouvrages font même état de personnes dont la principale source de revenus est justement de se livrer à des expériences cliniques. Et c'est ainsi que certains participants fournissent régulièrement la "bonne" réponse (selon leurs seuls intérêts) au lieu de donner la réponse "sincère" et ce, tout simplement afin de continuer à participer à l'étude clinique et en fin de compte à recevoir une rémunération complète.

Nous devons également tenir compte des pratiques de recrutement des études scientifiques qui, souvent, offrent un incitatif financier. À partir de là, si un participant se fait (1) offrir de l'argent et (2) offrir des massages gratuits, il peut (3) falsifier sa réponse à la douleur sans qu'il y paraisse et (4) manifester un comportement tantôt altruiste (en exagérer certaines réponses) ou tantôt égoïste (en faisant en sorte que l'étude perdure ou qu'il y participe plus longtemps). Les chercheurs peuvent limiter ce genre de problématique, mais ne peuvent pas l'éliminer entièrement. D'un autre côté, ils ne peuvent pas non plus annuler statistiquement les données recueillies parce que les exagérations sont beaucoup plus susceptibles d'être faites… dans le même sens.

Et enfin, pour conclure sur la douleur et le massage, mentionnons que l'*American College of Physicians* et l'*American Pain Society* sont en faveur de la massothérapie, l'acupuncture et la chiropractie pour le traitement de la lombalgie chronique.

Massothérapeute non requis?

Les études démontrent les bienfaits d'un massage lorsque fourni dans un milieu hospitalier par un parent ayant peu ou pas de formation antérieure en massothérapie.

[10] Des questionnaires scientifiques sont disponibles en cliquant sur ce lien: http://www.aqtn.ca/questions/practitioner-scope-of-practice/need-help-understanding-and-measuring-client-pain-or-anxiety-aqtn-has-done-the-research-for-you/

- Le massage périnatal par la femme elle-même ou par son conjoint (une fois par semaine durant 35 semaines) réduit la probabilité de traumatisme et de douleurs périnatals.
- Le massage favorise la croissance et le développement des prématurés et des enfants à faible poids à leur naissance. Les parents peuvent donner des massages sans grande formation, alors que pour leur part, les infirmières considèrent le massage comme accaparant trop leur temps.
- Le massage des nouveaux-nés favorise le gain de poids, améliore les périodes de veille et de sommeil, le développement neuromoteur et l'équilibre émotionnel, et il réduit aussi l'occurrence des infections nosocomiales (et donc le taux de mortalité infantile).
- Les huiles aident. Idéalement, le massage est donné par la mère, et non pas par un massothérapeute. Une autre étude ayant comparé le massage d'un nouveau-né donné la mère et celui donné par un massothérapeute qualifié n'a trouvé aucune différence statistiquement significative. Les mères se sont révélées moins dépressives et leur séjour à l'hôpital s'est raccourci de 3 à 6 jours. Cette découverte suggère donc que la pose d'affiches bien visibles dans les unités de soins intensifs néonatals pourrait inciter les mères à masser leur enfant.
- L'arthrite rhumatoïde juvénile: donner 15 minutes de massage par un parent par jour durant 30 jours réduit l'anxiété et le recours à hydrocortisone.
- Le massage des bras diminue la douleur et favorise un sentiment de proximité et de soutien entre les partenaires.
- Les femmes dont le mari ou le partenaire les masse lorsque surviennent les contractions utérines voient celles-ci durer moins longtemps.

Comparer des techniques de massage

- Pour les douleurs au bas du dos, le massage par point de pression procure plus de soulagement que le massage suédois classique, et beaucoup plus lorsqu'il est combiné avec l'exercice et l'éducation.
- Pour les maladies rhumatismales ou la fibromyalgie, le drainage lymphatique manuel est considéré comme plus efficace que le massage du tissu conjonctif (comme le fait aussi la réflexologie).

Massage versus exercice

- Pour les douleurs à l'aine (fréquentes chez les sportifs), l'exercice thérapeutique est meilleur que la physiothérapie et/ou le massage.
- Pour soulager la douleur des muscles endoloris, l'exercice léger est préférable au massage.

Limites de la massothérapie

LIMITES À L'ÉGARD DES PRÉMATURÉS / NOUVEAUX-NÉS

- Pour les prématurés, le massage n'a eu aucun effet sur le gain de poids, la durée du séjour à l'hôpital ou la durée de l'allaitement maternel.
- Pour les nouveaux-nés, le massage n'est pas aussi efficace que le traitement aux opiacés.

LIMITES SUR L'APAISEMENT DE LA DOULEUR

- Douleurs au cou: les effets secondaires du massage sont temporaires et bénins. Selon certaines études, le massage ne serait pas mieux que l'absence de traitement, les compresses chaudes, les exercices à mouvements amples, l'acupuncture, la lasérothérapie, les tractions manuelles, la mobilisation et l'éducation.
- Aucune conclusion définitive n'a été apportée quant à l'efficacité du massage pour soulager les douleurs au cou.
- Pour les maux de dos chroniques, le massage n'est pas efficace comparativement à la manipulation vertébrale. Pour la lombalgie chronique ou subaiguë, le massage convient.

AUTRES LIMITES

- L'allaitement au sein maternel est nettement meilleur que le massage ou un placebo.
- Dans le traitement de la dépression prénatale, les bienfaits du massage ne sont pas prouvés.
- Pour réduire les traumatismes périnataux en deuxième phase des contractions utérines (qu'on appelle communément "le travail"), les compresses chaudes sont meilleures que le massage.
- Pour mieux gérer la douleur durant les contractions utérines, le massage manque de preuves.

- Pour les enfants ayant reçu une greffe de cellules souches, le massage, la relaxation, les images mentales et l'humour ne sont pas plus susceptibles d'augmenter leur bonheur.
- Pour les maux de tête d'origine cervicale, la mobilisation de la partie supérieure de la colonne vertébrale offre plus d'avantages cliniques que le massage pour réduire la douleur et améliorer la flexibilité du cou.
- Une étude n'a montré aucune amélioration du système immunitaire avec le massage ou aucune réduction de cortisol.
- Pour les tendinites, en combinant massage frictionnel et physiothérapie, aucun avantage n'a été observé.
- Pour la démence (et troubles associés): les preuves sont insuffisantes, même lorsque le massage est combiné à des traitements pharmacologiques.
- Pour l'arthrose du genou, la glace est préférable au massage.
- Pour la paralysie faciale idiopathique, le massage est inefficace (idem pour l'électrostimulation de compresses chaudes et les exercices faciaux).
- Sur le fait que le massage, la thérapie cognitivo-comportementale, la relaxation ou la musique réduirait le stress chez les travailleurs de la santé, les preuves sont limitées.
- Sur les vertus du massage pour réduire la douleur chez les prématurés, les preuves sont insuffisantes.
- Le drainage lymphatique manuel suivi d'un massage autoadministré n'apporte aucun avantage pour réduire ou contrôler le lymphoedème des membres. Les manchons de compression sont plus efficaces.
- Comme traitement de première ligne, l'œstrogène vaginal à faible dose est recommandé pour renverser l'atrophie chez les survivantes du cancer postménopausique du sein.

Effets adverses et dangers du massage

La massothérapie est, en général, très sécuritaire. Les complications sont très rares. Mais les patients en bonne santé peuvent parfois éprouver des ecchymoses occasionnelles, un gonflement des muscles massés ou une augmentation temporaire de la douleur musculaire. Il peut aussi y avoir une réaction allergique aux huiles utilisées. Les plaies ouvertes sont évidemment à éviter.

L'une des études a montré que 10% des clients ressentent un léger malaise, celui-ci apparaissant dans les 12 heures suivant le massage, mais il ne dure pas plus de 36 heures.

Des conséquences plus sérieuses incluent:

- Des fractures.
- Des dislocations.
- Des hémorragies internes.
- L'apparition d'hématomes hépatiques.
- Le déblocage de thromboses veineuses profondes.
- Des sténoses ou déplacements urétéraux.

Une attention particulière est requise chez les patients atteints de cancer, éprouvant des problèmes au niveau de leurs plaquettes (cellules sanguines), et donc de la coagulation sanguine. Les patients prenant des médicaments comme le Coumadin, l'acide acétylsalicylique (aspirine) ou l'héparine méritent également une attention particulière. Tout massage qu'on veut donner à un client ayant subi une intervention médicale récente devrait aussi être préalablement approuvé par le médecin traitant.

Une formation spécialisée et une expérience adéquate sont essentielles pour les massothérapeutes qui travaillent avec des patients atteints de cancer. L'accent doit être mis sur la communication avec les oncologues, une bonne connaissance du dossier des patients et la sécurité générale.

Une astuce de l'**AQTN**[11]**:** il est important pour les massothérapeutes qui travaillent avec le public soient protégés par une assurance responsabilité civile et/ou une assurance erreurs et omissions.

Le mécanisme d'action de la massothérapie

Le mécanisme par lequel la massothérapie apporte des bienfaits corporels demeure encore méconnu. La médecine occidentale moderne a encore beaucoup de découvertes à faire, principalement en raison de notre compréhension limitée du cerveau, à partir duquel les émotions, la douleur et l'anxiété se manifestent.

[11] http://www.AQTN.ca

Dans la littérature sur le mécanisme de fonctionnement de la massothérapie, certaines théories dominantes soulèvent les points suivants:

DIMENSIONS PARTICULIÈRES

- La relation thérapeute/client joue un rôle sur le plan émotionnel, et à son tour, cette relation joue un rôle sur l'efficacité des effets physiologiques.
- Le massage suscite des réactions physiologiques et psychologiques.

ASPECTS MESURABLES

- Le massage induit des changements biochimiques locaux qui modulent localement le débit sanguin et l'oxygénation des muscles.
- Le massage améliore la pression artérielle, la fréquence cardiaque et la fréquence respiratoire.
- Le massage pourrait favoriser le drainage des fluides dans le traitement des fractures avec fixateurs et broches externes.
- On considère que le massage favorise clairement la circulation des sous-produits métaboliques associées aux lésions tissulaires.
- Le massage réduit l'hyperactivité des fibres viscérales afférentes.
- Les muscles chroniquement tendus limitent la circulation sanguine et peuvent être associés à la fatigue.
- Apparemment, le massage n'élimine pas l'acide lactique des muscles fatigués.
- Le massage aide à réduire la pression artérielle diastolique.
- La sécrétion d'ocytocine augmente durant les contacts cutanés (chez les nouveaux-nés, le taux d'ocytocine culmine lorsque leurs mains massent le sein de leur mère).
- Un massage des pieds peut améliorer la circulation sanguine, favoriser la relaxation et stimuler la sécrétion d'endorphine (réduisant ainsi la douleur et l'anxiété).

LE CERVEAU ET LE CORTISOL

- Des mécanismes subconscients sont certainement impliqués, lesquels ne sont pas connus, mais l'interaction réciproque entre le corps et l'esprit est évidente.

- La réduction de la douleur peut être un effet inconscient sur les parties du cerveau associées à la douleur et aux émotions (un argument tautologique très faible [12]).
- Le massage tempère le mécanisme central de perception de la douleur.
- Le massage favorise une sécrétion accrue de dopamine et de sérotonine accrue, fait diminuer le taux de cortisol.
- Le massage fait diminuer les niveaux de cortisol sérique.
- Le massage suédois contribue significativement à réduire le cortisol salivaire.
- Une étude affirme que l'effet du massage sur le cortisol est si petit qu'il n'est pas pertinent et en conclut que d'autres liens de causalité doivent encore être identifiés.

SYSTÈME IMMUNITAIRE ET INFLAMMATION

- 10 minutes de massage peuvent aider à réparer les dommages musculaires induits par l'exercice en refrénant l'inflammation et en stimulant le renouvellement des mitochondries.
- Le massage fait augmenter les taux de cellules tueuses naturelles (NK) et de lymphocytes chez les patientes atteintes d'un cancer du sein.
- Le massage renforce la fonction immunitaire (le mécanisme est inconnu), y compris le nombre de cellules NK et leur cytotoxicité (adultes, adultes infectés par le VIH, adultes atteints de cancer, enfants âgés de 2 à 4 ans). Une théorie soupçonne une interaction entre différents types de cellules, nommément les hormones et les cytokines.

AUTRES MÉCANISMES

- Le massage aide à réduire les troubles du sommeil (et donc à jouir d'un sommeil réparateur).
- Les huiles essentielles peuvent prolonger, voire renforcer les effets du massage.
- Une théorie veut que les traitements par massage atténuent l'acquisition nerveuse (par stress) de graisse chez les prématurés de sexe masculin.
- En utilisant des huiles (huile de noix de coco ou huile de carthame), celles-ci sont absorbées et cela fait en sorte d'augmenter les triglycérides chez les enfants.

[12] Commentaire de l'AQTN.

Conclusion et dernières remarques

Le vieillissement de la population fait miroiter que l'incidence de maladies physiques et mentales deviendra progressivement beaucoup plus répandue durant les 15 à 30 prochaines années. La massothérapie peut jouer un petit rôle dans la prévention, mais elle n'est pas adaptée pour traiter des problèmes de santé graves. Les changements que chacun de nous peut apporter à son mode de vie représentent la meilleure tactique. Entre autres éléments importants, il y a donc la prévention et les choix personnels de chaque personne. Dans une société en évolution rapide, stressante et individualiste, nous sommes tous responsables de notre propre santé.

L'un des fils conducteurs du texte fut jusqu'ici l'incorporation de la massothérapie dans les hôpitaux. Nous avons constaté qu'en matière de retour sur investissement, il est raisonnable de conclure qu'eu égard au critère budgétaire, la massothérapie ne devrait pas être intégrée au système de santé ou aux milieux hospitaliers du Québec.

Les plus grandes réductions de coûts hospitaliers s'observent lorsque des massages sont administrés par les parents (formés en quelques heures ou moins), généralement les mères des nouveaux-nés. L'AQTN soutient que pour le coût de quelques affiches apposées dans des endroits stratégiques dans les unités néonatales, le Québec pourrait économiser beaucoup d'argent, avoir des enfants plus sains et peut-être (ce n'est pas une utopie) voir son taux de mortalité infantile diminuer.

La force principale de la massothérapie tient à la réduction du stress, de l'anxiété et de la douleur chronique. Elle peut générer des économies substantielles (pouvant atteindre des millions de dollars), mais la relaxation, la méditation, la réflexologie ainsi que le yoga sont tous des formes de thérapies que chacun peut s'autoadministrer et qui nécessitent une formation moins formelle.

Concernant la douleur, sa cause est souvent liée à différentes activités quotidiennes que nous accomplissons, et c'est donc dire que faute d'apporter des changements importants à notre vie, la douleur réapparaîtra régulièrement. Le massage ne peut alors s'apparenter qu'à un sparadrap dispendieux qui n'arrivera pas à couper le mal à la racine du problème sans la participation active du client; toutefois et dans certains cas, le massage peut avoir un effet boule de neige des plus bénéfique.

Vous pouvez consulter www.AQTN.ca pour trouver un massothérapeute près de chez vous au Québec. Et il y a aussi www.LeMassage.info, un annuaire en ligne gratuit pour toutes les provinces, états et pays pour annoncer vos services en massothérapie et décrire vos modalités.

Question finale: «Devriez-vous recevoir un massage?»

Réponse: «Absolument!»

Table des matières

Acronymes provenant de la revue littéraire anglophone

AAP	American Academy of Pediatrics
ABM	Academy of Breastfeeding Medicine
ACDR CPR	Active compression-decompression cardiopulmonary resuscitation
ACR	American College of Rheumatology
ADHD	Attention deficit hyperactivity disorder
AMTA	American Massage Therapy Association
ART	Antiretroviral therapy
ATOM	Attitudes Towards Massage
BPI	Brief Pain Inventory
BMTs	Bone marrow transplants
CAM	Complementary and alternative medicine
CBT	Cognitive-behavioral therapy
CES-D	Center for Epidemiological Studies-Depression Scale
CDI	Children's Depression Inventory
CF	Cystic fibrosis
CGH	Cervicogenic headache
CINAHL	Cumulative Index to Nursing and Allied Health Literature
CK	Creatine kinase
CNCP	Chronic non-cancer pain
CRF	Cancer-related fatigue
CRAO	Central retinal artery occlusion
CSE	Combined spinal epidural
EFA	Essential fatty acid
FAP	Functional abdominal pain
FM	Fibromyalgia
HADS	Hospital Anxiety and Depression Scale
HCT	Hematopoietic cell transplantation
IBS	Irritable bowel syndrome
IPT	Interpersonal Psychotherapy
JIA	Juvenile idiopathic arthritis
LBP	Low-back pain
LBW	Low birthweight
MLD	Manual lymph drainage
NAS	Neonatal abstinence syndrome
NCC	National Cancer Centre
NICU	Neonatal intensive care unit

NIH	National Institutes of Health
NIHR	National Institute for Health Research
NK	Natural killer
NRP	Neonatal Resuscitation Program
NSAIDs	Non-Steroidal Anti-Inflammatory Drugs
OA	Osteoarthritis
PCG	Pregnancy and Childbirth Group
PD	Parkinson's disease
PIPP	Premature Infant Pain Profile
POMS	Profile of Mood State
PPD	Postpartum depression
PPI	Present pain intensity
PROMIS	Patient-Reported Outcomes Measurement Information System
PROQOLID	Patient-Reported Outcome and Quality of Life Instruments Database
QOL	Quality of life
RA	Rheumatoid arthritis
RCTs	Randomized controlled trials
RDQ	Roland Disability Questionnaire
RLS	Restless legs syndrome
ROM	Range of motion
RP	Retinitis pigmentosa
RSCL	Rotterdam Symptom Checklist
SCT	Stem cell transplantation
SMT	Spinal manipulative therapy
STAI	State-Trait Anxiety Inventory
STIs	Sexually transmitted infections
TENS	Transcutaneous electrical nerve stimulation
TM	Therapeutic massage
WHO	World Health Organization

ARTICLES DU COCHRANE LIBRARY (140)

1. Uterine massage for preventing postpartum haemorrhage

http://summaries.cochrane.org/CD006431/uterine-massage-for-preventing-postpartum-haemorrhage

Bleeding after childbirth (postpartum haemorrhage) is the leading cause of maternal deaths in Sub-Saharan Africa and Egypt, and yet it is largely preventable. Possible causes of heavy bleeding directly following childbirth or within the first 24 hours are that the uterus fails to contract after delivery (uterine atony), a retained placenta, inverted or ruptured uterus, and cervical, vaginal, or perineal tears.

In well-resourced settings haemorrhage is reduced by routine active management of delivery of the placenta, called the third stage of labour, using a drug to stimulate contraction of the uterus such as oxytocin. Uterine massage after delivery of the placenta can also promote contraction of the uterus. This involves placing a hand on the woman's lower abdomen and stimulating the uterus by repetitive massaging or squeezing movements.

The results of this review are inconclusive.

2. Massage therapy for people with HIV/AIDS

http://summaries.cochrane.org/CD007502/massage-therapy-for-people-with-hivaids

This review of the literature supports that massage therapy can benefit people with HIV/AIDS by improving quality of life, particularly if they receive the therapy in conjunction with other techniques, such as meditation and relaxation training, and provide more benefit than any one of these techniques individually. Furthermore, it may be that massage therapy can improve their body's ability to fight the disease; however, this is not yet convincingly proven.
Further research required.

3. Antenatal perineal massage for reducing perineal trauma

http://summaries.cochrane.org/CD005123/antenatal-perineal-massage-for-reducing-perineal-trauma

Antenatal perineal massage helps reduce both perineal trauma during birth and pain afterwards.

Most women are keen to give birth without perineal tears, cuts and stitches, as these often cause pain and discomfort afterwards, and this can impact negatively on sexual functioning. Perineal massage during the last month of pregnancy has been suggested as a possible way of enabling the perineal tissue to expand more easily during birth. The review of four trials (2497 women) showed that perineal massage, undertaken by the woman or her partner (for as little as once or twice a week from 35 weeks), reduced the likelihood of perineal trauma (mainly episiotomies) and ongoing perineal pain. The impact was clear for women who had not given birth vaginally before, but was less clear for women who had. Women should be informed about the benefits of digital antenatal perineal massage.

4. Deep transverse friction massage for the treatment of tendinitis

http://summaries.cochrane.org/CD003528/deep-transverse-friction-massage-for-the-treatment-of-tendinitis

These RCTs showed no benefit of deep transverse friction massage combined with concurrent physiotherapy modalities, when compared to either a control group with the same physiotherapy modalities, excluding deep transverse friction massage, or other active therapies such as phonophoresis or therapeutic ultrasound combined to placebo ointment, for the following outcomes: pain relief involved in the iliotibial band friction syndrome in runners, pain relief, improved functional status and increased grip strength involved in extensor carpi radialis tendinitis. These conclusions are limited by the lack of studies available, the use of subjective and non-validated scales for measuring pain, the combination of several physiotherapy modalities and the low sample size of the RCTs included in this systematic review.

5. Massage for low-back pain | Cochrane Summaries

http://summaries.cochrane.org/CD001929/massage-for-low-back-pain

Low-back pain (LBP) is one of the most common and costly musculoskeletal problems in modern society. Seventy to 85% of the population will experience LBP at some time in their lives. Proponents of massage therapy claim it can minimize pain and disability, and speed return to normal function.

Massage in this review is defined as soft-tissue manipulation using hands or a mechanical device on any body part. Non-specific LBP indicates that no specific cause is detectable, such as infection, neoplasm, metastasis, osteoporosis, rheumatoid arthritis, fracture, inflammatory process or radicular syndrome (pain, tingling or numbnness spreading down the leg.

Thirteen randomized trials (1596 participants) assessing various types of massage therapy for low-back pain were included in this review. Eight had a high risk and five had a low risk of bias. Massage was more likely to work when combined with exercises (usually stretching) and education. The amount of benefit was more than that achieved by joint mobilization, relaxation, physical therapy, self-care

education or acupuncture. It seems that acupressure or pressure point massage techniques provide more relief than classic (Swedish) massage, although more research is needed to confirm this.
No serious adverse events were reported by any patient in the included studies. However, some patients reported soreness during or shortly after the treatment. Some patients also reported an allergic reaction (e.g. rash or pimples) to the massage oil.
In summary, massage might be beneficial for patients with subacute (lasting four to 12 weeks) and chronic (lasting longer than 12 weeks) non-specific low-back pain, especially when combined with exercises and education.

6. Massage for promoting mental and physical health in infants under the age of six months

http://summaries.cochrane.org/CD005038/massage-for-promoting-mental-and-physical-health-in-infants-under-the-age-of-six-months

This review aimed to assess the impact of infant massage on mental and physical outcomes for healthy mother-infant dyads in the first six months of life. A total of 34 randomized trials were included. Twenty of these had significant problems with their design and the way they were carried out. This means that the we are not as confident as we would otherwise be that the findings are valid. That is to say, the findings of these 20 included studies may over- or under-estimate the true effect of massage therapy.

We combined the data for 14 outcomes measured physical health and 18 outcomes measured aspects of mental health or development. The results show limited statistically significant benefits for a number of aspects of physical health (for example, weight, length, head/arm/leg circumference, 24-hour sleep duration; time spent crying or fussing; blood bilirubin and number of episodes of illness) and mental health/development (for example, fine/gross motor skills personal and social behaviour and psychomotor development). However, all significant results were lost either at later follow-up points or when we removed the large number of studies regarded to be at high risk of bias.

These findings do not currently support the use of infant massage with low-risk population groups of parents and infants. The results obtained from this review may be due to the poor quality of many of the included studies, the failure to address the mechanisms by which infant massage could have an impact on the outcomes being assessed, and the inclusion of inappropriate outcomes for population groups (such as weight gain). Future research should focus on the benefits of infant massage for higher-risk population groups (for example, socially deprived parent-infant dyads), the duration of massage programmes, and could address differences between babies being massaged by parents or healthcare professionals.

7. Massage for promoting growth and development of premature and low birth-weight infants

http://summaries.cochrane.org/CD000390/massage-for-promoting-growth-and-development-of-premature-and-low-birth-weight-infants

In utero, infants are exposed to physical stimulation. This raises the question whether gentle physical massage helps babies born before 37 weeks gestation or weighing less than 2500 grams (5.5 pounds) to develop after birth, and if it can improve their behaviour. The review only included randomized controlled trials, studies in which a group of babies received massage and was compared with a similar group which did not. The authors searched the medical literature and contacted experts and found 14 studies. In most of these studies babies were rubbed or stroked for about 15 minutes, three or four times a day, usually for five or ten days. Some studies also included "still, gentle touch", in which nurses put their hands on babies but did not rub or stroke them. On average, the studies found that when compared to babies who were not touched, babies receiving massage, but not "still, gentle touch", gained more weight each day (about 5 grams). They spent less time in hospital, had slightly better scores on developmental tests and had slightly fewer postnatal complications, although there were problems with how reliable these findings are. The studies did not show any negative effects of massage. Massage is time consuming for nurses to provide, but parents can perform massage without extensive training.

8. Insufficient evidence to draw conclusions about the possibility that massage and touch interventions are effective for dementia or associated problems

http://summaries.cochrane.org/CD004989/insufficient-evidence-to-draw-conclusions-about-the-possibility-that-massage-and-touch-interventions-are-effective-for-dementia-or-associated-problems

Massage and touch interventions have been proposed as an alternative or supplement to pharmacological and other treatments to counteract anxiety, agitated behaviour, depression, and if possible to slow down cognitive decline in people with dementia. This review provides an overview of existing research on the use of massage for people with dementia. Eighteen studies of the effects of massage interventions were located, but only two small studies were of a sufficient methodological rigour to count as evidence to answer the question of effect.

The small amount of evidence currently available is in favour of massage and touch interventions, but is too limited in scope to allow for general conclusions. Further, high-quality randomized controlled trials are required.

9. Abdominal massage for the treatment of constipation

http://summaries.cochrane.org/CD009089/abdominal-massage-for-the-treatment-of-constipation

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

10. Aromatherapy and massage for symptom relief in patients with cancer

http://summaries.cochrane.org/CD009873/aromatherapy-and-massage-for-symptom-relief-in-patients-with-cancer

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

11. Massage for mechanical neck pain | Cochrane Summaries

http://summaries.cochrane.org/CD004871/massage-for-mechanical-neck-pain

We included 15 trials in this review that assessed whether massage could help reduce neck pain and improve function. Results showed that massage is safe, and any side effects were temporary and benign. However, massage did not show a significant advantage over other comparison groups. Massage was compared with no treatment, hot packs, active range-of-movement exercises, acupuncture, exercises, sham laser, manual traction, mobilization, and education.

There were a number of challenges with this review. Overall, the quality of the studies was poor and the number of participants in most trials was small. Most studies lacked a clear definition, description, or rationale for the massage technique used. Details on the credentials or experience of the person giving the massage were often missing. There was such a range of massage techniques and comparison treatments in the studies that we could not combine the results to get an overall picture of the effectiveness of massage. Therefore, no firm conclusions could be drawn and the effectiveness of massage for improving neck pain and function remains unclear.

12. Massage, reflexology and other manual methods for managing pain in labour

http://summaries.cochrane.org/CD009290/massage-reflexology-and-other-manual-methods-for-managing-pain-in-labour

We found six studies, with data available from five trials on 326 women, looking at the use of massage in labour for managing pain. There were no studies on any of the other manual healing methods. The six studies were of reasonable quality but more participants are needed to provide robust information. We

found that women who used massage felt less pain during labour when compared with women given usual care during first stage. However, more research is needed.

13. Massage therapy for preventing pressure ulcers

http://summaries.cochrane.org/CD010518/massage-therapy-for-preventing-pressure-ulcers

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

14. Active compression-decompression using a hand-held device for emergency heart massage

http://summaries.cochrane.org/CD002751/active-compression-decompression-using-a-hand-held-device-for-emergency-heart-massage

Does not refer to a massage in the context of this literary review.

15. Interventions (other than pharmacological, psychosocial or psychological) for treating antenatal depression

http://summaries.cochrane.org/CD006795/interventions-other-than-pharmacological-psychosocial-or-psychological-for-treating-antenatal-depression

There is not enough evidence available to determine if acupuncture, maternal massage, bright light therapy, or omega-3 fatty acids are effective interventions in treating antenatal depression.

Approximately 12% of women will suffer from depression during their pregnancy. Research suggests that women who experience significant stress, have a history of depression, lack social support, have a history of domestic violence, are not married and living alone, and have an unintended pregnancy or poor relationships may be at a higher risk than other women of developing antenatal depression. Symptoms can include overwhelming feelings of sadness and grief, loss of interest or pleasure in activities that are usually enjoyed, feelings of worthlessness or guilt, poor sleep, a change in appetite, severe fatigue and difficulty concentrating. Unfortunately, depression during pregnancy is related to poor maternal self-care behaviours, which may influence the baby's health; it also places a woman at significant risk of developing postpartum depression. Many women prefer not to take medication during their pregnancy and they are often interested in other complementary forms of treatment. The review found only six randomized controlled trials involving 402 women evaluating depression-specific acupuncture (the insertion of needles into the superficial body tissues for remedial purposes), maternal massage, bright light therapy, and omega-3 fatty acids for the treatment of antenatal depression. The included trials were too small to reach any conclusions; they also used a variety of interventions,

outcome measures and comparisons. The trials provided insufficient evidence to determine if these therapies are effective treatments for antenatal depression. Further research is needed.

16. Perineal techniques during the second stage of labour for reducing perineal trauma

http://summaries.cochrane.org/CD006672/perineal-techniques-during-the-second-stage-of-labour-for-reducing-perineal-trauma

The objective of this review was to assess the effect of perineal techniques during the second stage of labour on the incidence of perineal trauma. We included eight randomised trials (involving 11,651 women) conducted in hospital settings in six countries. The participants in the included studies were women with no medical complications who were expecting a vaginal birth. We conclude that there is sufficient evidence to support the use of warm compresses to prevent perineal tears. The procedure has been shown to be acceptable to both women and midwives. From the meta-analyses we found significant effect of the use of warm compresses compared with hands off or no warm compress on the incidence of third- and fourth-degree tears. We also found a reduction in third- and fourth-degree tears with massage of the perineum versus hands off; and of 'hands off' the perineum versus 'hands on' to reduce the rate of episiotomy. The studies in our systematic review have considerable clinical variation and the terms 'hands on', 'hands off', 'standard care' and 'perineal support' can mean different things and are not always defined sufficiently. The methodological quality of the included studied also varied.

The question of how to prevent the tears is complicated and involves many other factors in addition to the perineal techniques that are evaluated here, e.g. birth position, women's tissue, speed of birth. More research is necessary in this field, to evaluate perineal techniques and also to answer the questions of determinants of perineal trauma.

Main results:

We included eight trials involving 11,651 randomised women. There was a significant effect of warm compresses on reduction of third- and fourth-degree tears (risk ratio (RR) 0.48, 95% confidence interval (CI) 0.28 to 0.84 (two studies, 1525 women)). There was also a significant effect towards favouring massage versus hands off to reduce third- and fourth-degree tears (RR 0.52, 95% CI 0.29 to 0.94 (two studies, 2147 women)). Hands off (or poised) versus hand on showed no effect on third- and fourth-degree tears, but we observed a significant effect of hands off on reduced rate of episiotomy (RR 0.69, 95% CI 0.50 to 0.96 (two studies, 6547 women)).

Authors' conclusions:
The use of warm compresses on the perineum is associated with a decreased occurrence of perineal trauma. The procedure has shown to be acceptable to women and midwives. This procedure may therefore be offered to women.

17. Complementary and alternative therapies for pain management in labour

http://summaries.cochrane.org/CD003521/complementary-and-alternative-therapies-for-pain-management-in-labour

The pain of labour can be intense, with tension, anxiety and fear making it worse. Many women would like to labour without using drugs, and turn to alternatives to manage pain. Many alternative methods are tried in order to help manage pain and include acupuncture, mind-body techniques, massage, reflexology, herbal medicines or homoeopathy, hypnosis and music. We found evidence that acupuncture and hypnosis may help relieve labour pain. There is insufficient evidence about the benefits of music, massage, relaxation, white noise, acupressure, aromatherapy, and no evidence about the effectiveness of massage or other complementary therapies.

Fourteen trials were included in the review with data reporting on 1537 women using different modalities of pain management; 1448 women were included in the meta-analysis.
Few other complementary therapies have been subjected to proper scientific study.

18. Physical therapies for reducing and controlling lymphoedema of the limbs

http://summaries.cochrane.org/CD003141/physical-therapies-for-reducing-and-controlling-lymphoedema-of-the-limbs

One crossover study of manual lymph drainage (MLD) followed by self-administered massage versus no treatment, concluded that improvements seen in both groups were attributable to the use of compression sleeves and that MLD provided no extra benefit at any point during the trial.
All three trials have their limitations and have yet to be replicated, so their results must be viewed with caution.

19. Non-invasive physical treatments for chronic/recurrent headaches

http://summaries.cochrane.org/CD001878/non-invasive-physical-treatments-for-chronicrecurrent-headaches

Twenty-two studies with a total of 2628 patients (age 12 to 78 years) met the inclusion criteria. Five types of headache were studied: migraine, tension-type, cervicogenic, a mix of migraine and tension-type, and post-traumatic headache. Ten studies had methodological quality scores of 50 or more (out of a possible 100 points), but many limitations were identified.

For the prophylactic treatment of chronic tension-type headache, amitriptyline is more effective than spinal manipulation during treatment. However, spinal manipulation is superior in the short term after cessation of both treatments. Other possible treatment options with weaker evidence of effectiveness are therapeutic touch; cranial electrotherapy; a combination of TENS and electrical neurotransmitter modulation; and a regimen of auto-massage, TENS, and stretching. For episodic tension-type headache, there is evidence that adding spinal manipulation to massage is not effective.

20. Thermotherapy (heat treatment) for treating osteoarthritis of the knee

http://summaries.cochrane.org/CD004522/thermotherapy-heat-treatment-for-treating-osteoarthritis-of-the-knee

How well does thermotherapy work?

One study showed that massaging with ice for 20 minutes, 5 days a week for 2 weeks, improved muscle strength in the leg, the range of motion in the knee and decreased time to walk 50 feet compared to no treatment.

Another study showed that ice packs for 3 days a week for three weeks improved pain just as well as no treatment.

Another study showed that cold packs for 20 minutes for 10 periods decreased swelling more than no treatment. Hot packs for the same amount of time had the same effect on swelling as no treatment.

Three randomized controlled trials, involving 179 patients, were included in this review.

In one trial, administration of 20 minutes of ice massage, 5 days per week, for 3 weeks, compared to control demonstrated a clinically important benefit for knee OA on increasing quadriceps strength (29% relative difference). There was also a statistically significant improvement, but no clinical benefit in improving knee flexion ROM (8% relative difference) and functional status (11% relative difference).

Ice massage compared to control had a statistically beneficial effect on ROM, function and knee strength. Cold packs decreased swelling.

More well designed studies with a standardized protocol and adequate number of participants are needed to evaluate the effects of thermotherapy in the treatment of OA of the knee.

21. Pain management for women in labour: an overview of systematic reviews

http://www.cochrane.org/features/pain-management-women-labour-overview-systematic-reviews

There was less evidence for immersion in water, relaxation, acupuncture, massage and local anaesthetic nerve blocks or non-opioid drugs. The authors classed these interventions as what "may work".

The second group of pain relief approaches, although less well-supported by clinical evidence, were better tolerated, with women reporting improved satisfaction with pain relief for all except massage. The least supported or "insufficient evidence" group of pain relief interventions included hypnosis, biofeedback, sterile water injection, aromatherapy, transcutaneous electrical nerve stimulation (TENS) and injected or intravenous opioids.

Most of the evidence on non-drug interventions was based on just one or two studies and so the findings are not definitive. However, we found that immersion in water, relaxation, acupuncture and massage all gave pain relief and better satisfaction with pain relief.
We identified 15 Cochrane reviews (255 included trials) and three non-Cochrane reviews (55 included trials) for inclusion within this overview.

There is some evidence to suggest that immersion in water, relaxation, acupuncture, massage and local anaesthetic nerve blocks or non-opioid drugs may improve management of labour pain, with few adverse effects. Evidence was mainly limited to single trials. These interventions relieved pain and improved satisfaction with pain relief (immersion, relaxation, acupuncture, local anaesthetic nerve blocks, non-opioids) and childbirth experience (immersion, relaxation, non-opioids) when compared with placebo or standard care. Relaxation was associated with fewer assisted vaginal births and acupuncture was associated with fewer assisted vaginal births and caesarean sections.

22. Conservative treatment for exercise-related groin pain

http://summaries.cochrane.org/CD009565/conservative-treatment-for-exercise-related-groin-pain

Exercise-related groin pain is common in sports especially those involving running, kicking and changing directions, such as in soccer and hockey.

One study, based on an intention-to-treat analysis, found a significant difference favouring exercise therapy (strengthening with an emphasis on the adductor and abdominal muscles and training muscular co-ordination) compared with 'conventional' physiotherapy (stretching exercises, electrotherapy and transverse friction massage) in successful treatment at 16-week follow-up.

The second study (54 participants) found no significant differences at 16-week follow-up.
Further randomized trials are necessary to reinforce their findings.

23. Manipulation and Mobilisation for Mechanical Neck Disorders

http://summaries.cochrane.org/CD004249/manipulation-and-mobilisation-for-mechanical-neck-disorders

Neck pain is a common musculoskeletal complaint. It can cause varying levels of disability for the affected individual and is costly to society. Neck pain can be accompanied by pain radiating down the arms (radiculopathy) or headaches (cervicogenic headaches). Manipulation (adjustments to the spine) and mobilisation (movement imposed on joints and muscles) can be used alone or in combination with other physical therapies to treat neck pain.

This updated review included 27 trials (1522 participants) that compared manipulation or mobilization against no treatment, sham (pretend) treatments, other treatments (such as medication, acupuncture, heat, electrotherapy, soft tissue massage), or each other.

24. Manual therapy for asthma

http://summaries.cochrane.org/CD001002/manual-therapy-for-asthma

Various manual forms of therapy are used to try and relieve asthma. Chiropractic and osteopathic techniques aim to increase movement in the rib cage and the spine to try and improve the working of the lungs and circulation. Other manual techniques include chest tapping, shaking, vibration, and postures to help shift and cough up phlegm. Massage is also used. Various therapists use these techniques, including chiropractors, physiotherapists, osteopaths and respiratory therapists. The review found there is not enough evidence from trials to show whether any of these therapies can improve asthma symptoms, and more research is needed.

25. Aromatherapy for pain management in labour

http://summaries.cochrane.org/CD009215/aromatherapy-for-pain-management-in-labour

Aromatherapy draws on the healing power of plants with the use of essential oils to enhance physical and mental wellbeing. The oils may be massaged into the skin, in a bath or inhaled using a steam infusion or burner. The pain of labour can be intense, with tension, fear and anxiety making it worse. Many women would like to labour without using drugs, or invasive methods such as an epidural, and

turn to complementary therapies to help reduce their pain perception Many complementary therapies are tried and include acupuncture, mind-body techniques, massage, reflexology, herbal medicines or homoeopathy, hypnosis, music and aromatherapy.

The trials found no difference between groups for pain intensity, assisted vaginal birth, caesarean section or the use of pharmacological pain relief (epidural). Overall, there is insufficient evidence from randomised controlled trials about the benefits of aromatherapy on pain management in labour. More research is needed.

26. Acupuncture for neck pain

http://summaries.cochrane.org/CD004870/acupuncture-for-neck-pain

The study also included individuals with neck pain that lasted for at least six weeks, but they considered it to be chronic. Acupuncture was compared to sham acupuncture, waiting list, other sham treatments (sham laser, sham TENS) or other treatments (mobilization, massage, traction).

Neck pain is one of the three most frequently reported complaints of the musculoskeletal system. Treatments for neck pain are varied, as are the perceptions of benefits. Acupuncture has been used as an alternative to more traditional treatments for musculoskeletal pain. This review summarizes the most current scientific evidence on the effectiveness of acupuncture for acute, subacute and chronic neck pain.

There was limited evidence that acupuncture was more effective than massage at short-term follow-up. For chronic neck disorders with radicular symptoms, there was moderate evidence that acupuncture was more effective than a wait-list control at short-term follow-up.

There is moderate evidence that acupuncture relieves pain better than some sham treatments, measured at the end of the treatment. There is moderate evidence that those who received acupuncture reported less pain at short term follow-up than those on a waiting list. There is also moderate evidence that acupuncture is more effective than inactive treatments for relieving pain post-treatment and this is maintained at short-term follow-up.

27. There is insufficient evidence to support the use of acupuncture for the symptomatic treatment of restless legs syndrome.

http://summaries.cochrane.org/CD006457/there-is-insufficient-evidence-to-support-the-use-of-acupuncture-for-the-symptomatic-treatment-of-restless-legs-syndrome.

Another trial found that dermal needle therapy used in combination with medications and massage was more effective than medications and massage alone.

There is insufficient evidence to determine whether acupuncture is an efficacious and safe treatment for RLS. Further well-designed, large-scale clinical trials are needed.

28. Acupuncture for tension-type headache

http://summaries.cochrane.org/CD007587/acupuncture-for-tension-type-headache

Three of the four trials in which acupuncture was compared to physiotherapy, massage or relaxation had important methodological shortcomings. Their findings are difficult to interpret, but collectively suggest slightly better results for some outcomes with the latter therapies. In conclusion, the available evidence suggests that acupuncture could be a valuable option for patients suffering from frequent tension-type headache.

Eleven trials with 2317 participants (median 62, range 10 to 1265) met the inclusion criteria.

29. Physical treatments for idiopathic facial paralysis

http://summaries.cochrane.org/CD006283/physical-treatments-for-idiopathic-facial-paralysis

Bell's palsy (idiopathic facial paralysis) is commonly treated by various physical therapy strategies and devices, but there are many questions about their efficacy.

For this update to the original review, the search identified 65 potentially relevant articles. Twelve studies met the inclusion criteria (872 participants).

Low quality comparisons of electrostimulation with prednisolone (an active treatment) (149 participants), or the addition of electrostimulation to hot packs, massage and facial exercises (22 participants), reported no significant differences.

30. Relaxation therapy for preventing and treating preterm labour

http://summaries.cochrane.org/CD007426/relaxation-therapy-for-preventing-and-treating-preterm-labour

Preterm birth, before 37 completed weeks' gestation, is likely to have an effect on a baby's survival and health.

We investigated the effectiveness of relaxation or mind-body therapies such as meditation, massage, yoga, reflexology, breathing exercises, visualization, music therapy and aromatherapy, etc. for preventing or treating preterm labour or preventing preterm birth.

According to the results of this review, there is some evidence that relaxation during pregnancy reduces stress and anxiety. However, there was no effect on PTL/PTB. These results should be interpreted with caution as they were drawn from included studies with limited quality.

31. Methods of pin site care for reducing infection and complications associated with external bone fixators and pins

http://summaries.cochrane.org/CD004551/methods-of-pin-site-care-for-reducing-infection-and-complications-associated-with-external-bone-fixators-and-pins

Metal pins are sometimes used to apply traction or to attach other external fixation devices into broken arms or legs. These pins pierce through the skin. The way they are cared for may affect the frequency of infection. Different solutions are used for cleaning around pins, different dressings can be used, scabs may or may not be removed and massage might be used to drain fluids around them. Few clinical trials have investigated this area, and they were of poor quality. As a result, this review found no strong evidence that one pin care technique was better than any other for reducing the chance of infection and other complications.

The available trial evidence was not extensive, was very heterogeneous and generally of poor quality, so there was insufficient evidence to be able to identify a strategy of pin site care that minimises infection rates.

32. Placenta delivery at caesarean section

http://summaries.cochrane.org/CD004737/placenta-delivery-at-caesarean-section

Worldwide, caesarean section is the most common major operation performed on women. Some of the reported short-term morbidities include haemorrhage, postoperative fever and endometritis. The method of delivering the placenta is one procedure that may contribute to an increase or decrease in the morbidity of caesarean section. Two common methods used to deliver the placenta at caesarean section are cord traction and manual removal.

There are various methods of delivery of placenta at caesarean section. These include placental drainage with spontaneous delivery, cord traction and manual removal. The last two methods: cord traction (usually combined with massage or expression of the uterus) and manual removal are frequently used.
We included 15 studies (4694 women). There was significant heterogeneity for the duration of surgery, blood loss and haematological outcomes. The only possible contributing factor found was greater protection from blood loss in two trials in which cord traction was combined with uterine massage. A random-effects model meta-analysis was used for these outcomes.

33. Pain management for women in labour – an overview

http://summaries.cochrane.org/CD009234/pain-management-for-women-in-labour---an-overview

We found that immersion in water, relaxation, acupuncture and massage all gave pain relief and better satisfaction with pain relief.

There is some evidence to suggest that immersion in water, relaxation, acupuncture, massage and local anaesthetic nerve blocks or non-opioid drugs may improve management of labour pain, with few adverse effects. Evidence was mainly limited to single trials. These interventions relieved pain and improved satisfaction with pain relief (immersion, relaxation, acupuncture, local anaesthetic nerve blocks, non-opioids) and childbirth experience (immersion, relaxation, non-opioids) when compared with placebo or standard care. Relaxation was associated with fewer assisted vaginal births and acupuncture was associated with fewer assisted vaginal births and caesarean sections.

34. Combined chiropractic interventions for low-back pain

http://summaries.cochrane.org/CD005427/combined-chiropractic-interventions-for-low-back-pain

For this review, chiropractic was defined as encompassing a combination of therapies such as spinal manipulation, massage, heat and cold therapies, electrotherapies, the use of mechanical devices, exercise programs, nutritional advice, orthotics, lifestyle modification and patient education.

35. Individual Patient Education for low-back pain

http://summaries.cochrane.org/CD004057/individual-patient-education-for-low-back-pain

Patient education was no more effective than other interventions such as cognitive behavioural group therapy, work-site visits, x-rays, acupuncture, chiropractic, physiotherapy, massage, manual therapy, heat-wrap therapy, interferential therapy, spinal stabilisation, yoga, or Swedish back school.

Individual patient education was compared with no intervention in 12 studies; with non-educational interventions in 11 studies; and with other individual educational interventions in eight studies. Results showed that for patients with subacute LBP, there is strong evidence that an individual 2.5 hour oral educational session is more effective on short-term and long-term return-to-work than no intervention.

36. The McKenzie method for (sub)acute non-specific low-back pain

http://summaries.cochrane.org/CD009711/the-mckenzie-method-for-subacute-non-specific-low-back-pain

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

37. Reflexology for treatment of constipation

http://summaries.cochrane.org/CD008156/reflexology-for-treatment-of-constipation

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

38. Aminophylline for bradyasystolic cardiac arrest in adults

http://summaries.cochrane.org/CD006781/aminophylline-for-bradyasystolic-cardiac-arrest-in-adults

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

39. Cognitive behavioural therapy (CBT) for adults with HIV

http://summaries.cochrane.org/CD006494/cognitive-behavioural-therapy-cbt-for-adults-with-hiv

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

40. Adrenaline and vasopressin for cardiac arrest

http://summaries.cochrane.org/CD003179/adrenaline-and-vasopressin-for-cardiac-arrest

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

41. The McKenzie method for chronic non-specific low-back pain

http://summaries.cochrane.org/CD009712/the-mckenzie-method-for-chronic-non-specific-low-back-pain

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

42. Muscle energy technique for non-specific low-back pain

http://summaries.cochrane.org/CD009852/muscle-energy-technique-for-non-specific-low-back-pain

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

43. Probiotics for fibromyalgia

http://summaries.cochrane.org/CD010451/probiotics-for-fibromyalgia

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

44. Spring 2002 CAM_NEWS

http://www.cochrane.org/sites/default/files/uploads/Newsletters/Comp_Med_Spring_2002.pdf

45. Cognitive behavioural therapies for fibromyalgia syndrome

http://summaries.cochrane.org/CD009796/cognitive-behavioural-therapies-for-fibromyalgia-syndrome

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

46. Acupuncture for migraine prophylaxis

http://summaries.cochrane.org/CD001218/acupuncture-for-migraine-prophylaxis

Two small low-quality trials comparing acupuncture with relaxation (alone or in combination with massage) could not be interpreted reliably.

47. Exercise for Neck Pain

http://summaries.cochrane.org/CD004250/exercise-for-neck-pain

Neck pain is common; it can limit a person's ability to participate in normal activities and is costly. Exercise did show an advantage over the other comparison groups (including massage).

There appears to be a role for exercises in the treatment of chronic neck pain and cervicogenic headache if stretching and strengthening exercises are focused on the neck and shoulder blade region. There appears to be no advantage to arm stretching and strengthening exercises or a general exercise program.

48. Chinese herbal medicine may help reduce menstrual pain.

http://summaries.cochrane.org/CD005288/chinese-herbal-medicine-may-help-reduce-menstrual-pain.

Study not relevant to this literary review.

49. Wheelchairs for children under 12 with physical impairments

http://summaries.cochrane.org/CD010154/wheelchairs-for-children-under-12-with-physical-impairments

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

50. Cochrane Complementary Medicine Field Bursary Scheme

http://www.cochrane.org/policy-manual/251-cochrane-complementary-medicine-field-bursary-scheme

The list of Complementary Medicine Field topics comprises the entire spectrum of heath delivery mechanisms, including treatments that a person largely administers to him or herself (e.g. botanicals, nutritional supplements, health food, meditation, magnetic therapy); treatments that providers administer (e.g. acupuncture, massage therapy, reflexology, laser therapy, balneotherapy, chiropractic and osteopathic manipulations, certain types of psychological counselling, naprapathy); and treatments that a person administers to him or herself under the periodic supervision of a provider (e.g. yoga, biofeedback, Tai Chi, homeopathy, hydrotherapy, Alexander therapy, nutritional therapy, Ayurveda).
Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

51. Cochrane Complementary Medicine Field Bursary Scheme

http://www.cochrane.org/organisational-policy-manual/261-cochrane-complementary-medicine-field-bursary-scheme

Article also not pertinent for this literary review.

52. Ayurvedic medicine for schizophrenia

http://summaries.cochrane.org/CD006867/ayurvedic-medicine-for-schizophrenia

Treatment in an ayurvedic system is holistic, involving natural medicine, massage, diet and the regulation of lifestyle. Ayurveda has been used for the treatment of schizophrenia, a serious long-term mental health condition, since its formulation (c1000 BCE) although nowadays Western-style medication using antipsychotics and hospital treatment are also used.

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

53. Opiate treatment for opiate withdrawal in newborn infants

http://summaries.cochrane.org/CD002059/opiate-treatment-for-opiate-withdrawal-in-newborn-infants

An opiate such as morphine or dilute tincture of opium should probably be used as initial treatment to ameliorate withdrawal symptoms in newborn infants with an opiate withdrawal due to maternal opiate use in pregnancy. Use of opiates (commonly prescribed methadone or illicit heroin) by pregnant women may result in a withdrawal syndrome in their newborn infants. This may result in disruption of the

mother-infant relationship, sleeping and feeding difficulties, weight loss and seizures. Treatments for newborn infants used to ameliorate these symptoms and reduce complications include opiates, sedatives (phenobarbitone or diazepam) and supportive treatments (swaddling, settling, massage, relaxation baths, pacifiers or waterbeds).

Opiates compared to supportive care may reduce time to regain birth weight and duration of supportive care but increase duration of hospital stay.

The conclusions of this review should be treated with caution.

54. Therapeutic ultrasound for postpartum perineal pain and dyspareunia

http://summaries.cochrane.org/CD000495/therapeutic-ultrasound-for-postpartum-perineal-pain-and-dyspareunia

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

55. Antibiotic prophylaxis for third- and fourth-degree perineal tear during vaginal birth

http://summaries.cochrane.org/CD005125/antibiotic-prophylaxis-for-third-and-fourth-degree-perineal-tear-during-vaginal-birth

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

56. Day care for pre-school children

http://summaries.cochrane.org/CD000564/day-care-for-pre-school-children

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

57. Psychological treatments to help people with cystic fibrosis and their carers manage the disease

http://summaries.cochrane.org/CD003148/psychological-treatments-to-help-people-with-cystic-fibrosis-and-their-carers-manage-the-disease

The review includes 13 studies (five new at this update) representing data from 529 participants. Studies mainly assessed behavioural and educational interventions:
1. gene pre-test education counselling for relatives of those with CF;
2. biofeedback, massage and music therapy to assist physiotherapy;
3. behavioural and educational interventions to improve dietary intake and airway clearance;
4. self-administration of medication and education to promote independence, knowledge and quality of life; and
5. systemic interventions promoting psychosocial functioning.

Currently no clear evidence exists on the best psychological interventions to help people with CF and their carers manage the disease.

58. Nutritional interventions for reducing morbidity and mortality in people with HIV

http://summaries.cochrane.org/CD004536/nutritional-interventions-for-reducing-morbidity-and-mortality-in-people-with-hiv

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

59. Non-drug therapies for lower limb muscle cramps

http://summaries.cochrane.org/CD008496/non-drug-therapies-for-lower-limb-muscle-cramps

About one in every three adults are affected by lower limb muscle cramps. For some people, these cramps reduce quality of life, quality of sleep and participation in activities of daily living. Many interventions are available for lower limb cramps, but some are controversial, no treatment guidelines exist, and often people experience no benefit from the interventions prescribed.

Non-drug treatments are described as being effective for the treatment of muscle cramps. Non-drug treatments include muscle stretching, physical exercise, avoidance of physical fatigue, massage, relaxation, heat therapy, weight loss, sensory nerve stimulation, ankle splints worn while sleeping, and changes to sleeping and sitting positions.

There is limited evidence on which to base clinical decisions regarding the use of non-drug therapies for the treatment of lower limb muscle cramp. Serious methodological limitations in the existing evidence hinder clinical application.

60. Acupuncture for elbow pain
http://summaries.cochrane.org/CD003527/acupuncture-for-elbow-pain

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

61. Electronic News Bulleting May 29, 2008

http://www.cochrane.org/sites/default/files/uploads/Newsletters/ccinfo/CCInfo29May2008.txt

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

62. [Plain language title]

http://summaries.cochrane.org/CD010595/plain-language-title

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

63. Carbetocin for preventing postpartum haemorrhage

http://summaries.cochrane.org/CD005457/carbetocin-for-preventing-postpartum-haemorrhage

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

64. Interventions for preventing and treating pelvic and back pain in pregnancy

http://summaries.cochrane.org/CD001139/interventions-for-preventing-and-treating-pelvic-and-back-pain-in-pregnancy

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

65. Prescription drug use for managing agitation and aggression in people with acquired brain injury

http://summaries.cochrane.org/CD003299/prescription-drug-use-for-managing-agitation-and-aggression-in-people-with-acquired-brain-injury

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

66. Spiritual and religious interventions for adults in the latter stage of a disease

http://summaries.cochrane.org/CD007544/spiritual-and-religious-interventions-for-adults-in-the-latter-stage-of-a-disease

When meditation was combined with massage in the medium term it buffered against a reduction in quality of life.

The paucity of quality research indicates a need for more rigorous studies.

67. Lumbar supports for the prevention and treatment of low-back pain

http://summaries.cochrane.org/CD001823/lumbar-supports-for-the-prevention-and-treatment-of-low-back-pain

One study (164 people) reported mixed results on whether back supports improved function more than massage

Conclusions from this review should be viewed with caution due to the low quality of many of the studies.

68. Needling for encapsulated trabeculectomy filtering blebs

http://summaries.cochrane.org/CD003658/needling-for-encapsulated-trabeculectomy-filtering-blebs

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

69. Sedatives for opiate withdrawal in newborn infants

http://summaries.cochrane.org/CD002053/sedatives-for-opiate-withdrawal-in-newborn-infants

Treatments for newborn infants used to ameliorate these symptoms and reduce complications include opiates, sedatives (phenobarbitone or diazepam) and supportive treatments (swaddling, settling, massage, relaxation baths, pacifiers or waterbeds).

70. Management of faecal incontinence and constipation in adults with central neurological diseases

http://summaries.cochrane.org/CD002115/management-of-faecal-incontinence-and-constipation-in-adults-with-central-neurological-diseases

Objective: determine the effects of management strategies for faecal incontinence and constipation in people with neurological diseases affecting the central nervous system.

Currently such individuals are commonly advised to have a good fluid intake, a balanced diet, sufficient physical exercise, scheduled bowel routine and moderate use of medications. Bowel management employs a combination of medications (e.g. bulking agents, laxatives, enemas) and mechanical interventions (e.g. digital stimulation, manual evacuation, abdominal massage, rectal irrigation) established on a trial and error basis.

There is still remarkably little research on this common and, to patients, very significant condition. It is not possible to draw any recommendation for bowel care in people with neurological diseases from the trials included in this review.

71. Amifostine for salivary glands in high-dose radioactive iodine treated differentiated thyroid cancer

http://summaries.cochrane.org/CD007956/amifostine-for-salivary-glands-in-high-dose-radioactive-iodine-treated-differentiated-thyroid-cancer

Until better data become available, the use of sour candy or lemon juice to increase salivation might be more appropriate during radioactive iodine treatment for patients with differentiated thyroid cancer. Patients should be well informed of the importance of hydration, acid stimulation and glandular massage after radioactive iodine treatment. In addition, early recognition and treatment of xerostomia may improve outcomes.

No health-related quality of life and other patient-oriented outcomes were evaluated in the two included trials.

72. Octreotide for treatment of chylothorax in newborns

http://summaries.cochrane.org/CD006388/octreotide-for-treatment-of-chylothorax-in-newborns

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

73. Electrotherapy for neck pain

http://summaries.cochrane.org/CD004251/electrotherapy-for-neck-pain

For patients with acute whiplash, iontophoresis was no more effective than no treatment, interferential current or a combination of traction, exercise and massage for relieving neck pain with headache; pulsed electro-magnetic field was more effective than 'standard care'.

74. Interventions for preventing hamstring injuries

http://summaries.cochrane.org/CD006782/interventions-for-preventing-hamstring-injuries

Hamstring (muscles situated at the back of the thigh) injuries are common in sports such as football and basketball. These injuries are often serious, causing pain, long rehabilitation times and a distinct proneness to re-injury. Various interventions targeting the prevention of such injuries are in common use.

One small trial found that manual therapy (involving manipulation, massage and

specific stretches to joints and muscles of the spine and leg) may prevent injuries of leg muscles, including the hamstrings.

There is insufficient evidence from randomised controlled trials to draw conclusions on the effectiveness of interventions used to prevent hamstring injuries in people participating in football or other high risk activities for these injuries. The findings for manual therapy need confirmation.

75. Ultrasound therapy had no clinical benefit on pain relief or muscle strength in people with patellofemoral knee pain syndrome

http://summaries.cochrane.org/CD003375/ultrasound-therapy-had-no-clinical-benefit-on-pain-relief-or-muscle-strength-in-people-with-patellofemoral-knee-pain-syndrome

This review has been withdrawn.

76. Immersion in water in labour and birth

http://summaries.cochrane.org/CD000111/immersion-in-water-in-labour-and-birth

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

77. Preventing occupational stress in healthcare workers

http://summaries.cochrane.org/CD002892/preventing-occupational-stress-in-healthcare-workers

Healthcare workers suffer from work-related or occupational stress often resulting from high expectations coupled with insufficient time, skills and/or social support at work. This can lead to severe distress, burnout or physical illness, and finally to a decrease in quality of life and service provision. The costs of stress and burnout are high due to increased absenteeism and turnover.

We identified 14 RCTs, three cluster-randomised trials and two crossover trials, including a total of 1,564 participants in intervention groups and 1,248 controls. Two trials were of high quality.

Interventions were grouped into 1) person-directed: cognitive-behavioural, relaxation, music-making, therapeutic massage and multicomponent; and 2) work-directed: attitude change and communication, support from colleagues and participatory problem solving and decision-making, and changes in work organisation.

There is limited evidence that person-directed interventions can reduce stress

Limited evidence is available for the effectiveness of interventions to reduce stress levels in healthcare workers. Larger and better quality trials are needed.

78. Biphasic versus monophasic waveforms for transthoracic defibrillation in out-of-hospital cardiac arrest

http://summaries.cochrane.org/CD006762/biphasic-versus-monophasic-waveforms-for-transthoracic-defibrillation-in-out-of-hospital-cardiac-arrest

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

79. Superficial heat or cold for low back pain

http://summaries.cochrane.org/CD004750/superficial-heat-or-cold-for-low-back-pain

Heat and cold are commonly utilised in the treatment of low-back pain by both health care professionals and people with low-back pain.

The evidence for the application of cold treatment to low-back pain is even more limited, with only three poor quality studies located. No conclusions can be drawn about the use of cold for low-back pain. There is conflicting evidence to determine the differences between heat and cold for low-back pain.

80. Radiofrequency denervation for neck and back pain

http://summaries.cochrane.org/CD004058/radiofrequency-denervation-for-neck-and-back-pain

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

81. Spinal manipulative therapy for low-back pain

http://summaries.cochrane.org/CD000447/spinal-manipulative-therapy-for-low-back-pain

This review has been withdrawn.

82. Relaxation techniques for pain management in labour

http://summaries.cochrane.org/CD009514/relaxation-techniques-for-pain-management-in-labour

The pain of labour can be intense, with body tension, anxiety and fear making it worse. Many women would like to go through labour without using drugs, or invasive methods such as an epidural, and turn to complementary therapies to help to reduce their pain perception and improve management of the pain. Many complementary therapies are tried, including acupuncture, mind-body techniques, massage, reflexology, herbal medicines or homoeopathy, hypnosis, music and aromatherapy. Mind-body interventions such as relaxation, meditation, visualisation and breathing are commonly used for labour, and can be widely accessible to women through teaching of these techniques during antenatal classes. Relaxation and yoga may have a role with reducing pain, increasing satisfaction with pain relief and reducing the rate of assisted vaginal delivery. There was insufficient evidence for the role of music and audio-analgesia. However, there is a need for further research.

83. Patient support and education for promoting adherence to highly active antiretroviral therapy for HIV/AIDS

http://summaries.cochrane.org/CD001442/patient-support-and-education-for-promoting-adherence-to-highly-active-antiretroviral-therapy-for-hivaids

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

84. Micronutrient supplementation for children and adults with HIV infection

http://summaries.cochrane.org/CD003650/micronutrient-supplementation-for-children-and-adults-with-hiv-infection

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

85. Tranexamic acid for preventing bleeding after delivery

http://summaries.cochrane.org/CD007872/tranexamic-acid-for-preventing-bleeding-after-delivery

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

86. Active management of third stage of labour with ergot alkaloid drugs (e.g. ergometrine)

http://summaries.cochrane.org/CD005456/active-management-of-third-stage-of-labour-with-ergot-alkaloid-drugs-e.g.-ergometrne

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

87. Mechanical traction for neck pain with or without symptoms that radiate to the neck or arm

http://summaries.cochrane.org/CD006408/mechanical-traction-for-neck-pain-with-or-without-symptoms-that-radiate-to-the-neck-or-arm

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

88. Dance/movement therapy for cancer patients

http://summaries.cochrane.org/CD007103/dancemovement-therapy-for-cancer-patients

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

89. Prostaglandins for preventing postpartum haemorrhage

http://summaries.cochrane.org/CD000494/prostaglandins-for-preventing-postpartum-haemorrhage

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

90. Giving iron supplements to improve outcomes in children with HIV/AIDS

http://summaries.cochrane.org/CD006736/giving-iron-supplements-to-improve-outcomes-in-children-with-hivaids

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

91. Saline irrigation for the management of skin extravasation injury in neonates

http://summaries.cochrane.org/CD008404/saline-irrigation-for-the-management-of-skin-extravasation-injury-in-neonates

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

92. Ward reduction without general anaesthesia versus reduction and repair under general anaesthesia for gastroschisis in newborn infants

http://summaries.cochrane.org/CD003671/ward-reduction-without-general-anaesthesia-versus-reduction-and-repair-under-general-anaesthesia-for-gastroschisis-in-newborn-infants

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

93. Exercise therapy for patellofemoral pain syndrome

http://summaries.cochrane.org/CD003472/exercise-therapy-for-patellofemoral-pain-syndrome

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

94. Continuous and individual interrupted sutures for repair of episiotomy or second-degree tears

http://summaries.cochrane.org/CD000947/continuous-and-individual-interrupted-sutures-for-repair-of-episiotomy-or-second-degree-tears

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

95. Postpartum misoprostol for preventing maternal mortality and morbidity

http://summaries.cochrane.org/CD008982/postpartum-misoprostol-for-preventing-maternal-mortality-and-morbidity

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

96. Routine prophylactic drugs in normal labour for reducing gastric aspiration and its effects

http://summaries.cochrane.org/CD005298/routine-prophylactic-drugs-in-normal-labour-for-reducing-gastric-aspiration-and-its-effects

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

97. Family support in reducing morbidity and mortality in HIV-infected persons

http://summaries.cochrane.org/CD006046/family-support-in-reducing-morbidity-and-mortality-in-hiv-infected-persons

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

98. Corticosteroid injection for de Quervain's tenosynovitis

http://summaries.cochrane.org/CD005616/corticosteroid-injection-for-de-quervains-tenosynovitis

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

99. Behavioural treatment for chronic low-back pain

http://summaries.cochrane.org/CD002014/behavioural-treatment-for-chronic-low-back-pain

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

100. Cycled light in the intensive care unit for preterm and low birth weight infants

http://summaries.cochrane.org/CD006982/cycled-light-in-the-intensive-care-unit-for-preterm-and-low-birth-weight-infants

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

101. Telemedicine for the support of parents of high-risk newborn infants

http://summaries.cochrane.org/CD006818/telemedicine-for-the-support-of-parents-of-high-risk-newborn-infants

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

102. Acupuncture for shoulder pain

http://summaries.cochrane.org/CD005319/acupuncture-for-shoulder-pain

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

103. Self-management interventions for people living with HIV/AIDS

http://summaries.cochrane.org/CD008731/self-management-interventions-for-people-living-with-hivaids

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

104. One-step techniques for primary distal hypospadias in children and adolescents

http://summaries.cochrane.org/CD010372/one-step-techniques-for-primary-distal-hypospadias-in-children-and-adolescents

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

105. Cooling the body after cardiac arrest

http://summaries.cochrane.org/CD004128/cooling-the-body-after-cardiac-arrest

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

106. Mechanical chest compression machines for cardiac arrest

http://summaries.cochrane.org/CD007260/mechanical-chest-compression-machines-for-cardiac-arrest

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

107. Physical activity programs for promoting bone mineralization and growth in preterm infants

http://summaries.cochrane.org/CD005387/physical-activity-programs-for-promoting-bone-mineralization-and-growth-in-preterm-infants

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

108. Personally-tailored activities for improving psychosocial outcomes for people with dementia in community settings

http://summaries.cochrane.org/CD010515/personally-tailored-activities-for-improving-psychosocial-outcomes-for-people-with-dementia-in-community-settings

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

109. Personally-tailored activities for improving psychosocial outcomes for people with dementia in long-term care

http://summaries.cochrane.org/CD009812/personally-tailored-activities-for-improving-psychosocial-outcomes-for-people-with-dementia-in-long-term-care

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

110. Aerobic exercise for adults living with HIV/AIDS

http://summaries.cochrane.org/CD001796/aerobic-exercise-for-adults-living-with-hivaids

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

111. There is no evidence that adjunctive therapies for AIDS dementia are effective, though they are well-tolerated and safe.

http://summaries.cochrane.org/CD006496/there-is-no-evidence-that-adjunctive-therapies-for-aids-dementia-are-effective-though-they-are-well-tolerated-and-safe.

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

112. Herbal medicine for low-back pain

http://summaries.cochrane.org/CD004504/herbal-medicine-for-low-back-pain

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

113. Screening methods for dislocated or improperly formed hips in newborn infants

http://summaries.cochrane.org/CD004595/screening-methods-for-dislocated-or-improperly-formed-hips-in-newborn-infants

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

114. Some physiotherapy interventions are effective for shoulder pain in some cases.

http://summaries.cochrane.org/CD004258/some-physiotherapy-interventions-are-effective-for-shoulder-pain-in-some-cases.

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

115. Drugs and pacemakers for transient loss of consciousness

http://summaries.cochrane.org/CD004194/drugs-and-pacemakers-for-transient-loss-of-consciousness

Neurally mediated reflex syncope is the most common cause of transient loss of consciousness. In patients not responding to non-pharmacological treatment, pharmacological or pacemaker treatment might be considered.

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

116. Breastfeeding or breast milk for procedural pain in neonates

http://summaries.cochrane.org/CD004950/breastfeeding-or-breast-milk-for-procedural-pain-in-neonates

The primary objective was to evaluate the effectiveness of breastfeeding or supplemental breast milk in reducing procedural pain in neonates. The secondary objective was to conduct subgroup analyses based on the type of control intervention, gestational age and the amount of supplemental breast milk given.

Breast milk was found not to be effective in reducing validated and non-validated pain scores such as NIPS, NFCS, and DAN; only being significantly better when compared to placebo (water) or massage.

If available, breastfeeding or breast milk should be used to alleviate procedural pain in neonates undergoing a single painful procedure rather than placebo, positioning or no intervention. Administration of glucose/sucrose had similar effectiveness as breastfeeding for reducing pain. The effectiveness of breast milk for painful procedure should be studied in the preterm population, as there are currently a limited number of studies in the literature that have assessed it's effectiveness in this population.

117. There is no compelling evidence to support the use of the herbal medicines identified in this review for treatment of HIV infection and AIDS.

http://summaries.cochrane.org/CD003937/there-is-no-compelling-evidence-to-support-the-use-of-the-herbal-medicines-identified-in-this-review-for-treatment-of-hiv-infection-and-aids.

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

118. Anabolic steroids for the treatment of weight loss in HIV-infected individuals

http://summaries.cochrane.org/CD005483/anabolic-steroids-for-the-treatment-of-weight-loss-in-hiv-infected-individuals

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

119. Co-bedding premature twins to optimise their growth and brain development

http://summaries.cochrane.org/CD008313/co-bedding-premature-twins-to-optimise-their-growth-and-brain-development

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

120. Motivational interviewing for young people living with HIV

http://summaries.cochrane.org/CD009748/motivational-interviewing-for-young-people-living-with-hiv

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

121. Spinal manipulative therapy for chronic low-back pain

http://summaries.cochrane.org/CD008112/spinal-manipulative-therapy-for-chronic-low-back-pain

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

122. There is insufficient evidence to determine the effectiveness of physical activity programs in managing or improving cognition, function, behaviour, depression, and mortality in people with dementia

http://summaries.cochrane.org/CD006489/there-is-insufficient-evidence-to-determine-the-effectiveness-of-physical-activity-programs-in-managing-or-improving-cognition-function-behaviour-depression-and-mortality-in-people-with-dementia

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

123. Absorbable stitches for repair of episiotomy and tears at childbirth

http://summaries.cochrane.org/CD000006/absorbable-stitches-for-repair-of-episiotomy-and-tears-at-childbirth

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

124. TENS (transcutaneous nerve stimulation) for pain relief in labour

http://summaries.cochrane.org/CD007214/tens-transcutaneous-nerve-stimulation-for-pain-relief-in-labour

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

125. Interventions for improving the psychosocial well-being of children affected by HIV and AIDS

http://summaries.cochrane.org/CD006733/interventions-for-improving-the-psychosocial-well-being-of-children-affected-by-hiv-and-aids

Article not pertinent for this literary review

126. Non-invasive interventions for improving well-being and quality of life in patients with lung cancer

http://summaries.cochrane.org/CD004282/non-invasive-interventions-for-improving-well-being-and-quality-of-life-in-patients-with-lung-cancer

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

127. Drug-based and non-drug-based interventions to improve the bone mineral density in patients living with HIV

http://summaries.cochrane.org/CD005645/drug-based-and-non-drug-based-interventions-to-improve-the-bone-mineral-density-in-patients-living-with-hiv

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

128. The one small trial published is insufficient evidence for the efficacy of aroma therapy for dementia

http://summaries.cochrane.org/CD003150/the-one-small-trial-published-is-insufficient-evidence-for-the-efficacy-of-aroma-therapy-for-dementia

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

129. Shock wave therapy for elbow pain

http://summaries.cochrane.org/CD003524/shock-wave-therapy-for-elbow-pain

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

130. Non-surgical interventions for flat feet in children

http://summaries.cochrane.org/CD006311/non-surgical-interventions-for-flat-feet-in-children

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

131. Micronutrient supplementation interventions to reduce harm in pregnant and lactating women living with HIV

http://summaries.cochrane.org/CD009755/micronutrient-supplementation-interventions-to-reduce-harm-in-pregnant-and-lactating-women-living-with-hiv-_

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

132. Kangaroo mother care to reduce morbidity and mortality in low birthweight infants

http://summaries.cochrane.org/CD002771/kangaroo-mother-care-to-reduce-morbidity-and-mortality-in-low-birthweight-infants

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

133. Interventions for lateral hip pain (tendinopathy or bursitis)

http://summaries.cochrane.org/CD008924/interventions-for-lateral-hip-pain-tendinopathy-or-bursitis

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

134. Rehabilitation after surgery for Dupuytren's Contracture

http://summaries.cochrane.org/CD006508/rehabilitation-after-surgery-for-dupuytrens-contracture

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

135. Interventions for pes planus

http://summaries.cochrane.org/CD005120/interventions-for-pes-planus

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

136. Interventions for treating slipped upper femoral epiphysis (SUFE)

http://summaries.cochrane.org/CD010397/interventions-for-treating-slipped-upper-femoral-epiphysis-sufe

This Cochrane Review is at the protocol stage and there is no abstract or plain language summary.

137. Spinal manipulative therapy for acute low-back pain

http://summaries.cochrane.org/CD008880/spinal-manipulative-therapy-for-acute-low-back-pain

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

138. Local corticosteroid injection for trigger finger

http://summaries.cochrane.org/CD005617/local-corticosteroid-injection-for-trigger-finger

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

139. Issue 43 Cochrane News_final CA 12July2008

http://www.cochrane.org/sites/default/files/uploads/cochrane_news/Issue43CochraneNews_finalCA21Aug2008_000.pdf

140. Co-Chairs of the Cochrane Collaboration Steering Group

http://www.cochrane.org/sites/default/files/uploads/Newsletters/ccinfo/20020423.txt

The second issue of The Cochrane Library is out today, with 81 new and 50 updated Cochrane reviews in a wide range of areas, such as:

* Depositing your own blood to use for surgery: is it worthwhile? (With accompanying Hot Topic on Getting Ready for Surgery)

* Fluoride gels and tooth decay

* New surgical techniques for heavy menstrual bleeding

* Massage can give relief from low back pain

* Debriefing after psychological trauma may do more harm than good

And much more. See them all at:

www.cochraneconsumer.com : just click on the "NEW" symbol, and see our quick guide to all the new and updated material. And you can download a printable version of "What's New" as well.

141. Structured treatment interruptions (STI) in chronic unsuppressed HIV infection in adults

http://summaries.cochrane.org/CD006148/structured-treatment-interruptions-sti-in-chronic-unsuppressed-hiv-infection-in-adults

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

142. Family planning programs for HIV-positive women

http://summaries.cochrane.org/CD010243/family-planning-programs-for-hiv-positive-women

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

143. Progressive resistive exercise interventions for adults living with HIV/AIDS

http://summaries.cochrane.org/CD004248/progressive-resistive-exercise-interventions-for-adults-living-with-hivaids

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

144. The Aubrey Sheiham Public Health and Primary Care Scholarship

http://www.cochrane.org/about-us/awards-scholarships-funding-initiatives/fellowships-scholarships-and-bursaries

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

145. Custom-made foot orthoses for the treatment of foot pain

http://summaries.cochrane.org/CD006801/custom-made-foot-orthoses-for-the-treatment-of-foot-pain_

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

146. Pushing/bearing down methods for the second stage of labour

http://summaries.cochrane.org/CD009124/pushingbearing-down-methods-for-the-second-stage-of-labour

Article jugé non-pertinent pour cette revue littéraire sur la massothérapie

MEDSCAPE (48 ARTICLES)

1. Massage Therapy May Relieve Chronic Back Pain

http://www.medscape.com/viewarticle/745953

We conducted a trial to determine whether relaxation massage reduces pain and improves function in patients with chronic low back pain and compared relaxation and structural massage for treating this condition

Massage therapist patients cannot be blinded.

At 52 weeks, there were persistent but small benefits of relaxation massage for function, but not for symptom reduction.

We found that patients receiving massage were twice as likely as those receiving usual care to report significant improvements in both their pain and function," Dr. Cherkin said in a news release. "After 10 weeks, about two-thirds of those receiving massage improved substantially, versus only about one-third in the usual care group."

A study limitation was the lack of blinding of massage therapists and the only partial blinding of participants to treatment assignment. In addition, the exercises recommended in the 2 massage groups differed slightly, and the massage therapists were atypical, in that they had practiced for at least 5 years and had learned structural massage techniques. Generalizability of the findings is limited because the trial included mostly women with nonspecific chronic low back pain who were enrolled in a single healthcare system that serves a mostly white and employed population.

"Massage therapy may be effective for treatment of chronic back pain, with benefits lasting at least 6 months," the study authors conclude. "No clinically meaningful difference between relaxation and structural massage was observed in terms of relieving disability or symptoms."

2. Massage May Improve Growth Quality of Male Preterm Infants

http://www.medscape.com/viewarticle/773087

The researchers randomized 22 preemies (12 girls and 10 boys) to massage for 20 minutes twice daily or control care. In the latter, the massage therapist simply stood quietly by the bedside during these periods.

At four weeks, energy and protein intake as well as increase in weight, length, and body circumferences were similar across groups.

However, there appeared to be sex-specific responses. Female infants in the massage group had larger increases in subscapular skinfold thickness compared to control females.

Among males, the massage group had a smaller ponderal index, triceps skinfold thickness, mid-thigh skinfold thickness, and subscapular skinfold thickness compared to the control group. "This finding," say the investigators, "suggests massage promotes lean mass over fat mass in male preterm infants."
Male massage infants' adiponectin concentrations decreased over time in contrast to a significant, sustained increase in male control infants. This increase was correlated to ponderal index.

The researchers concede that the study was small but conclude, "The stable circulating adiponectin concentrations with massage treatment support the theory that massage attenuates stress-driven body fat acquisition in male preterm infants."

Dr. Moyer-Mileur added, "Our findings are clinically important as the ability of massage, a non-invasive therapy, to improve body fat deposition during infancy may lessen the risk of metabolic problems to preterm infants as they age."

3. Exercise as Good as Massage for Sore Muscles

http://www.medscape.com/viewarticle/782424

The aches and pains people suffer after exercising more than usual can be relieved just as well by more exercise as by massage, according to a new study.

"It's a common belief that massage is better, but it isn't better. Massage and exercise had the same benefits," said Dr. Lars Andersen, the lead author of the study and a professor at the National Research Center for the Working Environment in Copenhagen.

The study suggests that "maybe (massage or exercise) has some benefit for individuals prior to an activity, even though the benefit may be short-lasting".

It's not clear how massage or exercise would relieve soreness, but Brumitt said that it's thought that they help to clear out metabolic byproducts associated with tissue damage.

Andersen recommends that people try light exercise to ease their pain. The effect is moderate, and only offers temporary relief, but the benefit of using exercise, Dr. Andersen said, is that it doesn't require a trained therapist or travel time.

4. Evidence-based Clinical Practice Guidelines on Management of Pain in Older People

http://www.medscape.com/viewarticle/779782

Pain in older people is not only under-recognized, but is also under-treated. Many professional bodies have documented that pain in this rapidly growing population is poorly controlled.[1–7]

Some types of complementary therapy [e.g. acupuncture, transcutaneous electrical nerve stimulation (TENS), massage] have been used for older adults with painful conditions, although the available studies lack methodological rigour.

Other therapies such as massage can be used to treat chronic pain, in particular shoulder or knee pain. Reflexology reduces anxiety in patients with breast or lung cancer.

5. Study Shows Why Massage Helps Exercise Recovery

http://www.medscape.com/viewarticle/757978

Ten minutes of massage therapy can help repair exercise-induced muscle damage by subduing inflammation and renewing mitochondria. This mechanism is similar to the way nonsteroidal anti-inflammatory drugs (NSAIDs) work. Data from the small controlled study also debunk the notion that massage clears lactic acid from tired muscles.

When administered to skeletal muscle that has been acutely damaged through exercise, massage therapy appears to be clinically beneficial by reducing inflammation and promoting mitochondrial biogenesis."

Our findings suggest that the perceived positive effects of massage are a result of an attenuated production of inflammatory cytokines, which may reduce pain by the same mechanism as conventional anti-inflammatory drugs such as NSAIDs. The results elucidate the biological effects of massage in skeletal muscle and provide evidence that manipulative therapies may be justifiable in medical practice," the researchers conclude.

"There's general agreement that massage feels good, now we have a scientific basis for the experience," said coauthor Simon Melov, PhD, from the Buck Institute for Research on Aging, Novato, California, in a press statement.

6. Fibromyalgia: Does CAM Work?

http://www.medscape.com/viewarticle/762475

This is a case study.

Massage therapy is widely used by patients with FMS.[18] It has been examined as a stand-alone therapy and compared with electrical nerve stimulation, relaxation, and usual care or control.[23,24] Benefits have been short-lived, and the evidence supporting its use is considered modest.

A 2012 overview of systematic reviews of CAM therapies for FMS confirmed that chiropractic therapy was of no benefit. Some beneficial effects were found for hydrotherapy and massage in this review. Homeopathy and acupuncture were found to have promise but require more evidence.

In summary, several reviews of treatments for FMS have examined diverse CAM modalities. Some evidence supports the efficacy of hydrotherapy, massage, yoga, and homeopathy for symptom control.

7. Massage Improves Immune Function in Preterm Infants

http://www.medscape.com/viewarticle/774535

Massage therapy has been shown to increase immune function, including NK cell number and cytotoxicity, in healthy adults, HIV-infected adults, adults with cancer, and two- to four-year-olds, but its effects on the immune system of premature infants have not been studied until now.

"The mechanism of how massage improves the immune system is still not known and may be due to interplay of various cell types, hormones, and cytokines," the researchers say.

8. Effects and Predictors of Shoulder Muscle Massage for Patients With Posterior Shoulder Tightness

http://www.medscape.com/viewarticle/764305

Fifty-two patients completed the study (29 for the massage and 23 for the control). Massage was an effective treatment for patients with posterior shoulder tightness, but was less effective in patients with longer duration of symptoms, higher functional limitation, and less posterior deltoid tightness.

9. Nurse, Can I Offer You a Chair Massage?

http://www.medscape.com/viewarticle/773306

Massage may be an effective intervention at least for alleviating short-term stress. The purpose of this study was to assess the feasibility of integrating chair massage into the daily workload of a small group of inpatient and outpatient nurses and measure its efficacy in alleviating stress-related symptoms.
Single-arm study with 203 nurses, 40 agreed to participate in the study. The nurses were invited to schedule a weekly 15-minute chair massage for a total of 10 weeks.

Nearly all (92%) of the nurses had positive comments about the massage program, reporting better sleep, reduced pain, and improved stress and anxiety. Most (79%) reported improved job satisfaction and more than half (61%) indicated that they would be willing to pay for chair massages if regularly available at their work place.

This study has a number of limitations, including a small, nonrandomized sample and no control group.

10. FDA Warns Consumers About ShoulderFlex Massager

http://www.medscape.com/viewarticle/755928

The FDA has issued a new warning to consumers against the use of a massage device called the Shoulder*Flex* Massager, which was recalled earlier this year after it was blamed for causing at least one death.

There have been reports of one death and one near-death, due to strangulation, associated with the use of the Shoulder*Flex* Massager.

11. Use of Complementary and Alternative Medicine Among Men With Prostate Cancer in a Rural Setting

http://www.medscape.com/viewarticle/752806

Not pertinent for the purposes of this literary review.

12. Effects of Rehabilitative Interventions on Pain, Function and Physical Impairments in People with Hand Osteoarthritis

http://www.medscape.com/viewarticle/738704

Massage therapy was shown to be effective in reducing pain in patients with hand OA; however, owing to the lower quality (3 on the PEDro scale) of the one study on massage,[27] it is hard to draw definitive conclusions about massage therapy.

The effects of all interventions, except massage, were investigated on hand function in six of the 10 studies.

Not pertinent for the purposes of this literary review.

13. Complementary and Alternative Medicine Use in England: Results from a National Survey

http://www.medscape.com/viewarticle/730431

Of all CAM modalities, massage had the highest lifetime prevalence of use (13.1%), followed by aromatherapy (11.2%) and acupuncture/acupressure (11.2%), relaxation (10.0%) and osteopathy (9.9%).

14. Musculoskeletal Rehabilitation in the Person with Scleroderma

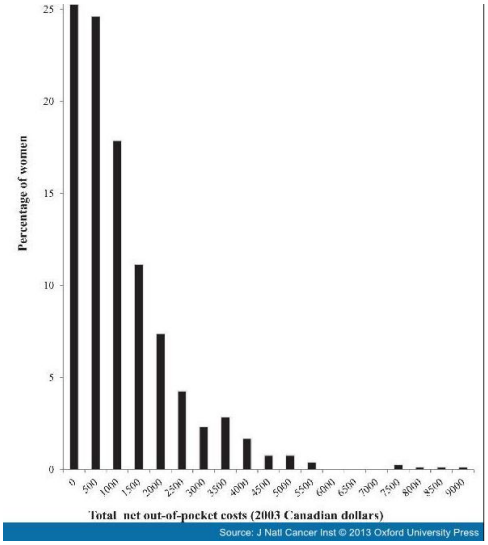
http://www.medscape.com/viewarticle/717087

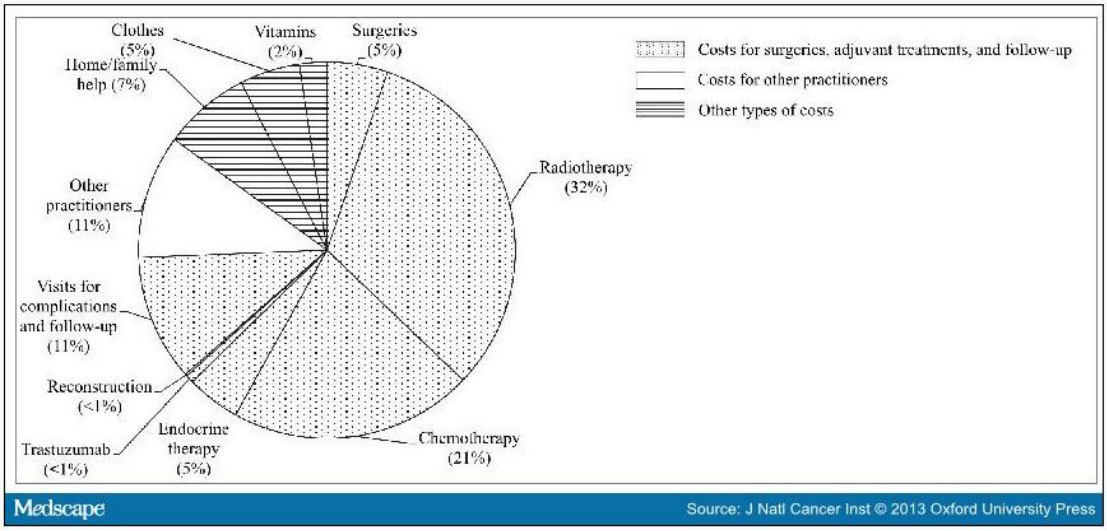
Recently, the efficacy of a combination of connective tissue massage and joint manipulation for the hand was assessed in a randomized controlled trial[26••] (Table 4). Forty participants with scleroderma were randomly assigned to an intervention group (combination massage, joint manipulation, and home exercise program for 1 h, two times a week) or a control group (home exercise program) and treated for 9 weeks. The intervention group had significant improvements in fist closure, hand motion (Hand Mobility in Scleroderma test), hand function (Cochin index), and quality of life (SF-36; HAQ). Only fist closure improved significantly in the control group.

15. Out-of-Pocket Costs in the Year After Early Breast Cancer Among Canadian Women and Spouses

http://www.medscape.com/viewarticle/780179

We also measured amounts paid for consultations with different types of practitioners for help coping with the disease or treatments. These practitioners included physiotherapists, dieticians, psychologists, massage therapists, chiropractors, acupuncturists, and homeopaths. Women were asked about the number of consultations they had had and whether they paid for them. Costs were then estimated by multiplying the number of consultations by an average rate for each type of care in Quebec in 2003.[21] Although we asked about consultations with a psychiatrist, social worker, and occupational therapist, these were virtually always provided as part of hospital care and therefore resulted in no out-of-pocket cost.





16. Neonatal Abstinence Syndrome Linked to Exorbitant Costs

http://www.medscape.com/viewarticle/803656

Dr. Roussos-Ross recommended ways that physicians can help decrease the incidence of neonatal abstinence syndrome, including the following: use nonopioid pharmacologic management of pain in pregnant women, such as physical therapy and massage therapy.

17. Assessment and Management of Cancer-related Fatigue

http://www.medscape.com/viewarticle/780777

The 2012 National Comprehensive Cancer Network defines cancer-related fatigue (CRF) as "a distressing persistent, subjective sense of physical, emotional and/or cognitive tiredness or exhaustion related to cancer or cancer treatment that is not proportional to recent activity and interferes with usual functioning."[1] Fatigue is one of the most common symptoms that cancer patients experience when receiving treatment with chemotherapy and/or radiation.

The NCCN guidelines organize the nonpharmacologic interventions into 3 categories: activity enhancement (eg, exercise), physical therapies (eg, massage), and psychosocial interventions (eg, cognitive behavioral therapy).[1]

Several massage studies show clinical significance, but similar to acupuncture, more large-scale randomized control trials are needed for statistical significance to confirm efficacy.[10,68–70] One randomized control study (N = 86) looked at the efficacy of classical massage treatment for reducing symptoms related to breast cancer and improving mood.[70] Women with primary breast cancer were randomized into either the massage group or the waiting list. The intervention group received biweekly 30-minute classical massages in the back and neck area twice a week for 5 weeks. The control group did not receive additional treatment beyond usual care. Each intervention participant completed questionnaires at baseline (T1), at the end of intervention (T2), and at 11 weeks follow-up (T3). Results showed a reduction in fatigue at the end of the intervention, which was sustained over time and was statistically significant compared with the control group at week 11. If massage can be proven in larger studies to be effective for reducing CRF, it could be used as an additional intervention to medication and physical activity.[10]

18. After Stem Cell Transplant, Children Soon Recover Emotionally

http://www.medscape.com/viewarticle/758103

Dr. Phipps and colleagues examined whether children adjusted better long-term after SCT when additional therapies such as humor therapy and massage therapy were added to standard care, or when a parent was also provided with massage therapy and relaxation/imagery work. They found that there was no significant difference between the groups, and to their surprise, most children who had undergone SCT were at least as happy as healthy children at week 24.

19. Pain Experience of the Elderly

http://www.medscape.com/viewarticle/754762

The aims of the study were to determine the prevalence of pain in an older population living in the community, to obtain a description of the older adult's pain experience, and to determine strategies used to manage their pain.

The participants in this study used a variety of modalities to alleviate their pain symptoms, including the use of nonsteroidal antiinflammatory drugs, antiinflammatory drugs, alternative measures, analgesics, and emollients. Oral medications were the predominant method of pain relief. Although pharmacologic strategies are effective, research indicates that physiologic changes in the elderly may alter the effectiveness of pharmacologic interventions owing to altered absorption rates or altered stomach pH (Davis & Srivastava, 2003). It has been effective to combine pharmacologic and nonpharmacologic therapies (home remedies, massage, topical agents, and heat/cold applications) for relief of chronic pain in the elderly (Davis & Srivastava, 2003). The present study shows that these methods were not found to be as useful as medication and inactivity for pain relief.

Research on alternative and complementary therapies has found that massage therapy can be useful in reducing stress and pain in the elderly (Trombley, Thomas, & Mosher-Ashley, 2003) and that foot massage increases blood circulation, promotes relaxation, and stimulates endorphin secretion, resulting in a reduction of pain and anxiety (Jirayingmongkoi, Chantein, Phengchomjan, & Bhangananda, 2002). Lansbury (2000) found that elders wish to be active in their treatment plan and given choices in addition to conventional treatments of medication, exercise, and physiotherapy. The focus in the treatment of pain should be improved physical function, as well as enhanced quality of life (Weiner, 2007).

20. Pain Interventions in Premature Infants

http://www.medscape.com/viewarticle/771825

Evidence-based practice is not new. It is traceable to the 1700s but not defined and used until the 1980s.

Controversial evidence is based on research findings better termed *research based evidence* [5,6] that entails making decisions about how to provide care by integrating the best available evidence with practitioner expertise and other resources, but there have not been sufficient experimental studies to provide conclusive evidence. An example is massage therapy to reduce pain during painful procedures in premature infants. Most researchers prefer using the term *levels of evidence*, which indicates the strength or weakness of the published research.[18,19] For practical purposes, this article will use the terms conclusive evidence and controversial evidence.

Massage therapy is a form of systematic tactile and kinesthetic stimulation that has been noted to enhance the infant's developmental outcomes, lower serum cortisol levels, shorten hospital stay, and enhance weight gain.[95–98] However, in terms of reducing painful experiences, only two studies are published. Gentle massages of the leg before heel prick in 23 preterm infants decreased behavioral pain responses on the NIPS and decreased HR, but there were no differences in RR or SO_2 levels.[70] Another study randomly allocated infants to one of three groups: (1) moderate pressure massage, (2) light pressure massage, and (3) no massage therapy.[71] Preterm infants who received 15 minutes of moderate pressure massage therapy exhibited lower HRs than infants who did not receive massage therapy or who received light pressure massage therapy after removal of the surgical tape.[71] Currently, there is insufficient evidence to support the use of massage in reducing pain in preterm infants, mostly because the term is not clearly defined.

Massage, swaddling, breastfeeding, and rocking remain inconclusive, as very few studies have assessed the benefits of these interventions.

21. Informal Caregivers of Hematopoietic Cell Transplant Patients

http://www.medscape.com/viewarticle/752728

Self-care Module Hematopoietic cell transplantation caregivers in the study of Wilson et al[33] reveal that it is important to balance the "me and my world" with the "us and our world". Balancing the 2 worlds through integration of self-care strategies is a particular challenge for caregivers in light of all of the new caregiving responsibilities. Health-promotion techniques such as regular exercise, yoga, massage, eating well, and sleep hygiene offer caregivers an opportunity to focus on their own health and physical well-being.[45–47] Simply teaching caregivers to plan healthy meals is a method of self-care and provides a measure of attainable control and assists with health promotion. Regular exercise provides caregivers with a physical outlet for the stresses associated with caregiving. It also improves the body's cardiovascular, immune system, and mental well-being. Yoga, a combination of breathing

exercise, physical postures, and meditation to reduce the health effects of daily stress, is the fifth most common complementary and alternative medicine technique used among Americans (http://nccam.nih.gov/news/report.pdf). Yoga with patients and caregivers in a palliative day-care environment suggested that caregivers benefited from a restorative form of yoga.[47] Massage therapy is another complementary therapy designed to reduce stress. Improvement of caregiver physical and psychological wellbeing through relaxing with a massage has been demonstrated.[45]

22. Chronic Non-cancer Pain

http://www.medscape.com/viewarticle/750409

Understanding this complex biopsychosocial nature of CNCP for many patients, clinicians readily used or referred for a variety of treatment modalities for their patients. Massage therapy was used by 78% of clinicians, acupuncture by 73%, and some other type of alternative treatment by 65% of clinicians (for example, yoga, meditation, biofeedback, trigger point, chiropractic or osteopathic manipulation). Clinicians who reported participation in CNCP continuing medical education (CME) within the last 5 years also reported higher use of cognitive behavioral therapy (41% vs. 29%, $P = .04$), and biofeedback/meditation/relaxation training (38% vs. 21%, $P < .001$).

23. The Management of Pain in Metastatic Bone Disease

http://www.medscape.com/viewarticle/761904

Massage therapy can help ease general aches and pains, especially in patients who are bed-bound or who have limited mobility. A recent pilot study that included 30 Taiwanese cancer patients with bone metastases assessed the effects of massage therapy on pain, anxiety, and physiologic relaxation over a 16- to 18-hour period.[11] Massage therapy had a positive impact on pain and anxiety, providing an effective immediate benefit [$t(29) = 16.5$, $P = .000$; $t(29) = 8.9$, $P = .000$], short-term benefit, in 20 to 30 minutes [$t(29) = 9.3$, $P = .000$; $t(29) = 10.1$, $P = .000$], intermediate benefit, in 1 to 2.5 hours [$t(29) = 7.9$, $P = .000$; $t(29) = 8.9$, $P = .000$], and long-term benefit, in 16 to 18 hours [$t(29) = 4.0$, $P = .000$; $t(29) = 5.7$, $P = .000$]. The most significant effect occurred 15 minutes after the intervention [$F = 11.5$ (1, 29), $P < .002$] or 20 minutes after the intervention [$F = 20.4$ (1, 29), $P < .000$], and no patients have reported any adverse effects as a result of massage therapy.

24. Effectiveness of an Intensive Multidisciplinary Headache Treatment Program

http://www.medscape.com/viewarticle/710317

Concerning headache treatment, there are few empirical studies comparing multidisciplinary headache programs to other treatment regimes.

In a controlled randomized trial, Lemstra et al[8] found positive treatment results for a less intensive multidisciplinary migraine treatment program (1 dietary and 2 group stress-management lectures, 2 massage therapy sessions, 18 exercise therapy sessions, a neurologist and physical therapist intake and discharge) for patients with chronic migraines; however, the pre-post changes were based on self-perceived improvement and not on headache diary documentation.

25. Integrative Oncology: Complementary Therapies in Cancer Care

http://www.medscape.com/viewarticle/586874

Randomized controlled studies indicate that many complementary therapies control treatment-related physical and emotional symptoms including pain, fatigue, nausea, xerostomia, anxiety, and depression in both adult and pediatric cancer patients. Importantly, many of these interventions produce long-lasting improvement.

Complementary therapies include massage therapy, acupuncture, mind-body therapies, music therapy, physical exercise, and herb and botanical use. Of these, herbs are the most commonly employed complementary medicine by cancer patients[2,3].

Massage has long been used to reduce tension, anxiety, and pain in various populations including cancer patients. Surveys indicate that over 20% of cancer patients use massage therapy.[4,5] Through the application of pressure and motion to the muscle and connective tissues of the body, massage therapy elicits both physiological and psychological responses.

In a study involving breast cancer patients, massage therapy was shown to reduce depression, anger, and pain.[6,7] In patients undergoing bone marrow transplantation, reductions in diastolic blood pressure, distress, nausea, and anxiety were detected immediately after receiving upper body massage.[8] Furthermore, massage therapy reduced central nervous system/neurologic complications, which include anxiety, depression, and fatigue, in patients following bone marrow transplantation compared to those receiving therapeutic touch or friendly visits.[9] Data from another study indicate that massage therapy and light therapeutic touch (without deep tissue stimulation) reduced fatigue and pain, resulting in decreased four-week nonsteroidal anti-inflammatory use and improved mood in cancer patients. Improvements were also reported in blood pressure, heart rate, and respiratory rate.[10]
Although most studies have reported the effects of massage in adult patients, pediatric cancer patients also experienced reduced pain after massage therapy.[11] Massage is one of the most commonly used pain management strategies for pediatric patients newly diagnosed with leukemia.[12]

In addition to massage, foot reflexology offers beneficial effects such as reductions in pain, anxiety, and nausea in cancer patients.[13] Reflexology teaching protocols have been successfully administered to caregivers, and subsequent relief in pain intensity and anxiety has been reported in metastatic cancer patients.[14]

Most types of massage (i.e. Swedish, light touch, and foot) result in various levels of symptom relief for patients; however, those receiving Swedish or light touch massages reported a significantly greater reduction in symptoms compared to those receiving foot massages and the beneficial effects persisted for up to 48 hours.[15]

Although the mechanism by which massage induces symptom relief is not fully known, increased dopamine and serotonin along with decreased cortisol levels have been reported following massage.[7,16] In addition, there was an increase in natural killer cells and lymphocyte levels in breast cancer patients following massage therapy.[6] However, conflicting results were reported in a recent study.[17] It is possible that many factors including location of massage, massage intensity, or psychological impact of surgery, chemotherapy, or radiation may impact the efficacy of massage therapy.

26. Acupuncture May Successfully Lift Depression in Pregnant Women

http://www.medscape.com/viewarticle/716657

Approximately 10% of women who are pregnant have clinical depression. Of those, 20% experience worsened symptoms during pregnancy. Although this rate of depression is similar to that of postpartum and nonpregnant women, concerns about using antidepressants leave pregnant women with few alternatives.

27. Providing Palliative Care to Family Caregivers Throughout the Bone Marrow Transplantation Trajectory

http://www.medscape.com/viewarticle/735542

In an attempt to treat both the patient and caregiver in a holistic manner, use of integrative services should be considered as part of the plan of care. Massage therapy has been shown to decrease anxiety, depression, and fatigue in BMT caregivers when compared with healing touch therapy and control groups. Participants in this study felt that receiving undivided attention and having time away from caregiving responsibilities were associated with improvements in positive energy and strength. Although the sample size of this particular study was small (n = 36), the findings suggest the need for further research in the use of other integrative techniques to relieve both patient and caregiver burden.[22]

28. Managing Vulvovaginal Complaints in a Postmenopausal Breast Cancer Survivor

http://www.medscape.com/viewarticle/579096

Acupuncture, massage therapy (specifically directed to the pelvic floor), relaxation, and stress management can also improve quality of life even if they are not particularly effective in decreasing atrophic symptoms.

If a woman is willing to use a short course of a locally administered, low-dose vaginal estrogen, I recommend this as my first-line treatment to reverse the atrophy before she starts a nonhormonal intervention. I follow this course even for breast cancer survivors, with the consent of the patient and her oncologist. If the woman cannot or will not use estrogen, even for as short as 2 to 3 months, I work with her to find the best combination of lifestyle and over-the-counter vaginal treatments for satisfactory results. To date, I have not found just one nonhormonal management algorithm that gives satisfactory results for all of my patients.

29. Low Back Pain: Evaluating Presenting Symptoms in Elderly Patients

http://www.medscape.com/viewarticle/712253

For patients who do not improve with self-care options, certain nonpharmacologic therapies have proven benefits. For acute low back pain, spinal manipulation has been helpful. For chronic or subacute low back pain, helpful therapies may include intensive interdisciplinary rehabilitation, exercise therapy, acupuncture, massage therapy, spinal manipulation, yoga, cognitive-behavioral therapy, or progressive relaxation.[4] Once the pain is significantly relieved, low stress activities such as walking, stationary biking, or swimming can be recommended. Physical therapy is often helpful.

30. Complementary Medicine for Children and Young People Who Have Attention Deficit Hyperactivity Disorder

http://www.medscape.com/viewarticle/744677

Not applicable for this literary review.

31. Diagnosing Premenstrual Syndrome

http://www.medscape.com/viewarticle/718973

Premenstrual symptoms are common among menstruating women, with approximately 75% reporting some discomfort with their cycles.

Recommended activities for regular exercise include brisk walking, swimming, cycling, or other aerobic activity for at least 30 to 60 minutes 3 to 5 days a week. Suggest stress-reduction techniques such as biofeedback, massage therapy, and yoga. Although the safety and efficacy of herbal remedies have not been established, many women report relief with black cohash root and evening primrose oil.
The most effective pharmacological treatment options are the non-steroidal anti-inflammatory drugs (NSAIDs).

32. Are the Economics of Complementary and Alternative Medicine Different to Conventional Medicine?

http://www.medscape.com/viewarticle/705608

> "In our opinion any therapy that makes specific claims for being able to treat specific conditions should have evidence of being able to do this above and beyond the placebo effect". [103]

When it comes to the practicalities of undertaking economic analyses of CAM therapies, a number of arguments can be found in the literature as to why the evaluation of this modality may differ to that of conventional medicine.[11,19,24] One such argument is that CAM offers something that cannot be detected by existing health outcomes measurement, such as the experience of holistic-practitioner care by the patient.[19,25] Others claim that it is not feasible to conduct randomized trials for therapies that are not well defined.[26] For example, how is a 'course of massage therapy' defined? Such arguments are valid to the extent that they identify challenges to be overcome. However, these arguments do not fully acknowledge that the economic evaluation of pharmaceuticals, despite its general acceptance, is still faced with many of the same challenges.[27]

33. Nurses Journal Scan, July 2008

http://www.medscape.com/viewarticle/578395

Current therapy for OA of the knee is focused on symptom relief because there is no disease-modifying therapy available. Many older people use alternative therapies such as herbal and massage treatment for relief of knee pain.

Massage therapy also has been shown to have positive effects on musculoskeletal or chronic pain. It has been suggested that massage leads to increased serotonin and dopamine and "closes the gate" to the pain stimulus. Massage may also increase endorphin levels and enhance local blood flow, linked to the clearance of local pain mediators. Massage therapy has been shown to be an effective treatment in some areas of musculoskeletal problems, such as low back pain, neck pain, or chronic pain. It has also been suggested that an essential oil might prolong the effects of massage.
The aim of this study was to assess the efficacy of massage with aromatic ginger essential oil (*Zingiber officinale*) in relieving knee pain and stiffness as well as enhancing physical functionality and quality of life among older persons. The participants' satisfaction as well as any adverse events from this add-on treatment were also measured.

Fifty-nine older persons were enrolled in a double-blind, placebo-controlled experimental study group from the Community Centre for Senior Citizens, Hong Kong. Participants in the intervention and placebo groups received a session of 30-35 minutes of aroma massage on both lower limbs 6 times within 2-3 weeks.

The massage consisted of effleurage and petrissage applied over the front and back of both legs of the participants. Various muscles on the thigh and leg were massaged; tendons in the lower limbs were massaged also. The massage treatment was given by a nurse with training in leg aroma-massage. The intervention was 6 massage sessions with ginger and orange oil over a 3-week period. The placebo control group received the same massage intervention with olive oil only, and the control group received no massage. Assessment was done at baseline and at 1 and 4 weeks after treatment. Changes from baseline to the end of treatment were assessed on knee pain intensity, stiffness level, and physical functioning and quality of life using standardized tools.

The findings indicated that there were statistically significant mean changes between the 3 time-points timepoints within the intervention group on 3 of the outcome measures: knee pain intensity, stiffness level, and enhancing physical function, but these were not apparent with the between-groups comparison 4 weeks after the massage. The improvement of physical function and pain was also superior in the intervention group compared with both the placebo and control groups at 1 week after treatment but was not sustained at 4 weeks. The changes in quality of life were not statistically significant for any of the 3 groups.

The researchers concluded that aroma-massage therapy with ginger seems to have potential as an alternative method for short-term knee pain relief.

Editor's Comment

Asian cultures have relied on herbal medicine and massage for centuries. Given the frequently occurring problem of knee pain, these effective techniques may well be offered to individuals in other cultures as additional treatment options.

34. A Review of Complementary and Alternative Medicine Practices among Cancer Survivors

http://www.medscape.com/viewarticle/727404

About 4 of 10 adults in the United States use some type of complementary or alternative medicine (CAM) therapy, with the rate being higher among patients with serious illnesses, such as cancer.
Studies have reported higher rates of use among patients with serious illnesses, including cancer (Miller et al., 2008; Saxe et al., 2008). Several specific therapies had marked increases as well, including deep breathing exercises, meditation, massage therapy, and yoga (NIH, 2007).

35. Palliative Care for Cancer Patients: An Interdisciplinary Approach

http://www.medscape.com/viewarticle/582054

Additionally, the use of complementary non-drug techniques may play an increasing role as they are studied. For example, it has recently been reported that massage therapy is an effective and safe adjuvant therapy for the relief of acute postoperative pain after a major operation.[19]

36. Postpartum Depression

http://www.medscape.com/viewarticle/736748

Postpartum depression (PPD) is a cross-cultural form of major depressive disorder that affects some 13% of women and can have serious health consequences for both the mother and her child.

Standard treatments for PPD include psychotherapy and antidepressants. However, treatment of a thyroid condition or insomnia, or even regular exercise or massage may also be beneficial.

Another non-pharmacologic intervention for PPD that has reportedly resulted in significant improvement is massage therapy for either the mother, or for the infant as administered by the mother. Dimidjian et al[17] reported that when a woman's partner provided 20 minutes of massage to her twice a week for 16 weeks, depression and anxiety symptoms significantly decreased over controls, and infant outcomes improved. Although results for infant massage were less clear, five weekly sessions of infant massage by the mother, as taught in an infant massage class, were associated with greater self-reported improvements over controls.[17]

37. Americans Spend $34 Billion on Alternative Medicine

http://www.medscape.com/viewarticle/706996

"Americans turn to treatments like acupuncture, chiropractic care, and massage therapy to deal with these painful conditions," she said, adding that groups like the American College of Physicians and the American Pain Society are on record as endorsing these therapies as useful options for the treatment of chronic back pain.

38. Management of Functional Abdominal Pain and Irritable Bowel Syndrome in Children and Adolescents

http://www.medscape.com/viewarticle/723605

Massage therapy has been hypothesized to reduce excitation of visceral afferent fibers and possibly dampen central pain perception processing, but there are limited data on the usefulness of massage therapy for FAP or IBS.

The conditions were, in order of frequency: stress/anxiety; headaches/migraine; back pain; respiratory problems; insomnia; cardiovascular problems; and musculoskeletal problems. Thus, the likelihood of patients with fibromyalgia being referred for CAM therapies would be expected to increase as they see more CAM practitioners.

39. The Case of an Educated Woman With Fibromyalgia Seeking CAM Therapies

http://www.medscape.com/viewarticle/731309

People are most likely to seek CAM therapies for conditions that are chronic and do not have an effective single remedy,[7,8] and fibromyalgia meets both of these criteria.

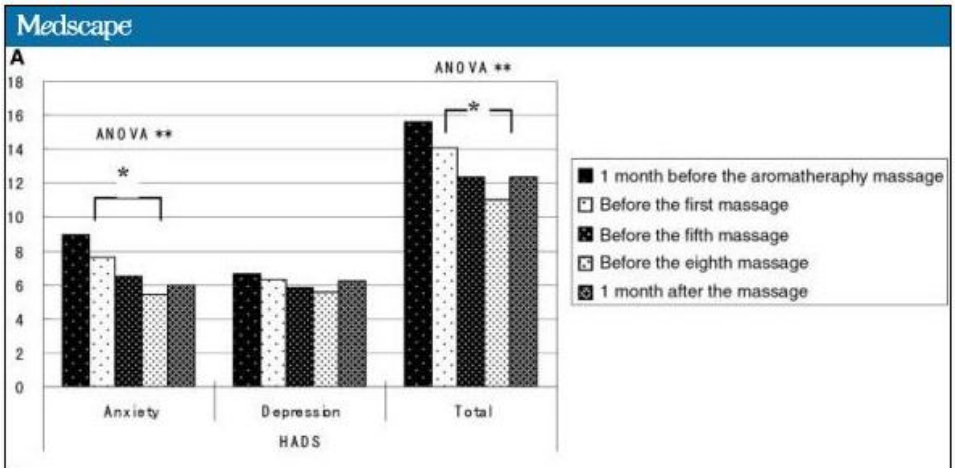
The highest frequency of use was reported for exercise for a specific medical problem (48% of respondents). This was followed by prayer (45%); massage (44%); chiropractic treatment (37%); and vitamin C, vitamin E, magnesium, or vitamin B complex (ranging from 25% to 35%).

40. Anxiolytic Effect of Aromatherapy Massage in Patients with Breast Cancer

http://www.medscape.com/viewarticle/718370

We examined how aromatherapy massage influenced psychologic and immunologic parameters in 12 breast cancer patients in an open semi-comparative trial. We compared the results 1 month before aromatherapy massage as a waiting control period with those during aromatherapy massage treatment and 1 month after the completion of aromatherapy sessions. The patients received a 30 min aromatherapy massage twice a week for 4 weeks (eight times in total). The results showed that anxiety was reduced in one 30 min aromatherapy massage in State-Trait Anxiety Inventory (STAI) test and also reduced in eight sequential aromatherapy massage sessions in the Hospital Anxiety and Depression Scale (HADS) test. Our results further suggested that aromatherapy massage ameliorated the immunologic state. Further investigations are required to confirm the anxiolytic effect of aromatherapy in breast cancer patients.

Since immunologic activity is a critical factor in determining a patient's prognosis, it is very important to examine the effect of aromatherapy on immunologic activity.

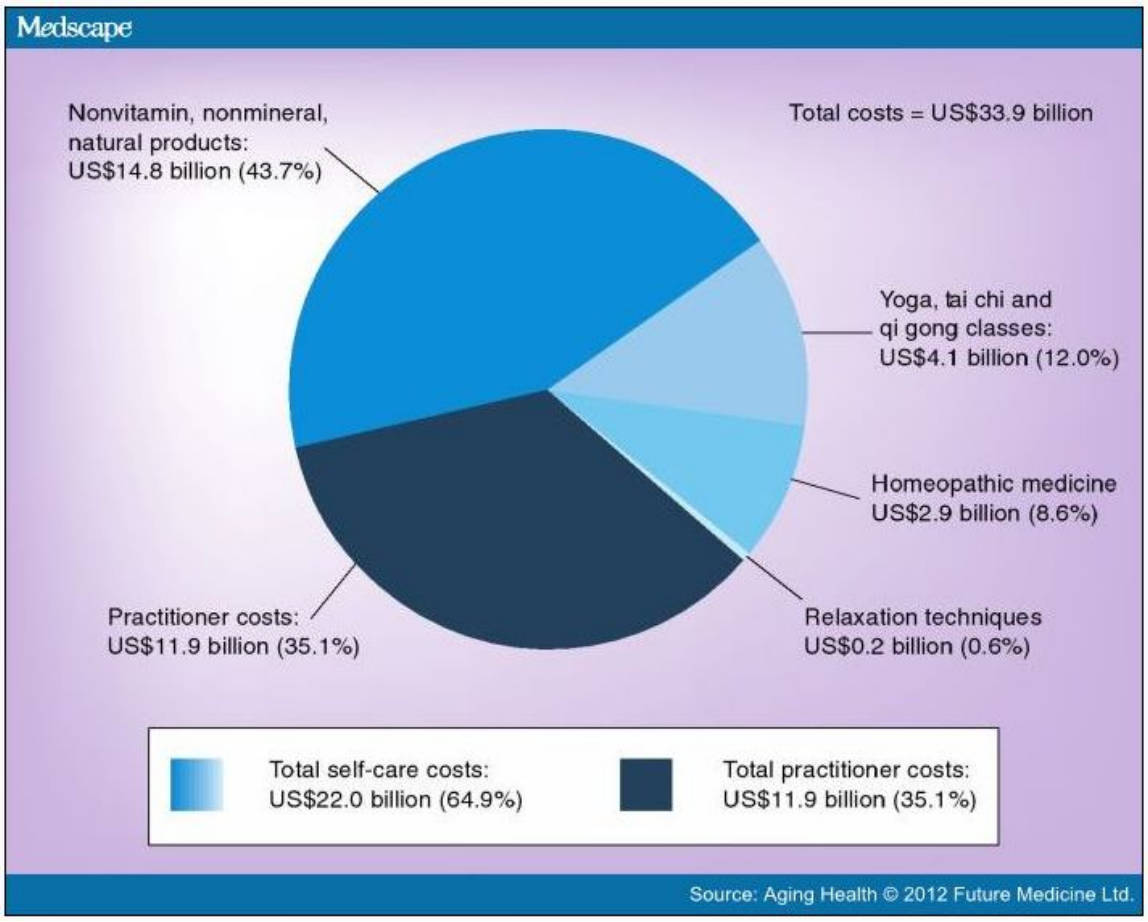


Our results suggest that aromatherapy massage is a viable complementary therapy that significantly reduces anxiety in breast cancer patients.

41. Complementary and Alternative Medicine for Rheumatic Diseases

http://www.medscape.com/viewarticle/770898

The most commonly used therapies were nonvitamin, nonmineral, natural products (17.7%), deep-breathing exercises (12.7%), meditation (9.4%), chiropractic or osteopathic manipulation (8.6%), massage (8.3%) and yoga (6.1%). Between 2002 and 2007, increased use was seen among adults for acupuncture (28% increase), deep-breathing exercises (9%), massage therapy (66%), meditation (24%), naturopathy (50%) and yoga (20%).[1] On the other hand, use of CAM modalities, such as herbal medicines, has decreased significantly.



Massage Therapy

Manual therapy techniques are composed of a variety of procedures directed at the musculoskeletal structures in the treatment of pain. Two major subcategories exist: those that produce joint motion and

those that do not. The first subcategory includes manipulation, mobilization and manual traction. The second subcategory involves massage therapy.[33] Massage is one of the most popular CAM therapies in the USA.[34] Between 2002 and 2007, the 1-year prevalence of the use of massage by the US adult population increased from 5% (10.05 million) to 8.3% (18.07 million).[34]

Massage therapy is widely used by patients with FM seeking symptom relief. A recent review article to determine whether massage therapy can be a viable treatment of FM symptoms included two single-arm studies and six randomized controlled trials.[35] All reviewed studies showed short-term benefits of massage, but only one single-arm study reported long-term benefits. The review authors suggested that, optimally, massage should be painless, its intensity should be increased gradually from session to session in accordance with patient's symptoms and that sessions should be performed once or twice a week at a minimum. A more recent study presented the results of treatment of 70 subjects for FM with vibration massage by deep oscillations.[36] The efficiency of treatment was evaluated using the FIQ, a visual analog scale, and the Pain Sensation Scale. This study demonstrated improvement of symptoms, improvement of quality of life, and reduction in pain when participants were re-evaluated 2 months after treatment. In another study, manual lymph drainage therapy, in which the lymph vessels are gently massaged, and connective tissue massage, which uses a shear force at connective tissue interfaces, were tested in 50 FM patients. The patients were divided randomly into two groups. Twenty five participants received manual lymph drainage therapy; the other 25 underwent connective tissue massage. The treatment program was carried out five-times a week for 3 weeks in each group. Pain was evaluated by a visual analog scale. The FIQ and Nottingham Health Profile were used to describe health status and health-related quality of life. In both treatment groups, significant improvements were found in pain intensity, pain pressure threshold and health-related quality of life. However, manual lymph drainage therapy was found to be more effective than connective tissue massage according to some sub-items of FIQ (morning tiredness and anxiety) and by the total FIQ score.[37] Another study, using reflexology, a specific pressure technique that works on precise points of the feet, helped decrease the experience of pain in subjects with FM.[38] Thus, the existing literature provides modest support for the use of massage therapy in FM. Additional rigorous research is needed in order to establish massage therapy as a safe and effective intervention for FM. Considerably more information is required on which patient characteristics might predict response since many patients with FM experience tenderness to the touch.

Massage therapy is being utilized by OA patients, and represents a potentially effective option to manage pain in this disorder as well. A pilot study of massage therapy for OA of the knee included 68 adults with radiographically confirmed OA of the knee. Participants were randomized to biweekly (for 4 weeks), then weekly (for four additional weeks) Swedish massage performed during 1 h sessions or a wait-list control group. Subjects receiving massage therapy demonstrated significant improvements in the WOMAC pain, stiffness, physical functional disability domains and visual analog pain scale compared with usual care. Notably, the benefits persisted up to 8 weeks following the cessation of massage.[39] A

randomized dose-finding trial completed in 2012 included 125 adults with OA of the knee and sought to identify the optimal dose of massage within an 8-week treatment regimen. Participants were randomized to one of four regimens of a standardized Swedish massage regimen (30 or 60 min weekly or biweekly) or to a usual care control.[39] WOMAC global scores and visual analog pain scales improved significantly in the 60-min massage groups compared with usual care at 8 weeks. A dose–response curve based on WOMAC global scores showed increasing effect with greater total time of massage, but with a plateau at the 60 min per week dose. Given the superior convenience of a once-weekly protocol, cost savings and consistency with a typical real-world massage protocol, the 60 min once weekly dose was determined to be optimal, establishing a standard for future trials.[4] More definitive research is needed investigating not only the efficacy, but also cost–effectiveness, of massage for OA of the knee and other joints, as well as research exploring the mechanisms by which massage may exert its effects in this clinical application and in general.

42. When the Going Gets Tough

http://www.medscape.com/viewarticle/804220

Levodopa-induced motor complications of Parkinson's disease, including motor fluctuations and dyskinesias, become increasingly frequent as the disease progresses, and are often disabling. Oral and transdermal therapies have limited efficacy in controlling these problems. Advanced device-aided therapies, including continuous infusion of apomorphine, deep brain stimulation and levodopa-carbidopa intestinal gel can all ameliorate these complications. This review summarises the principles of each of these therapies, their modes of action, efficacy and adverse effects, and gives advice on timely identification of suitable patients and how to decide on the most appropriate therapy for a given patient.

Scrupulous hygiene, proper needle insertion technique and site rotation may help. Unproven techniques, such as massage, ultrasound and silicone gel dressings may reduce nodule formation in individual patients.[27]

43. Sports and Exercise-Related Tendinopathies

http://www.medscape.com/viewarticle/804326

This should be considered an update and a signposting document rather than a comprehensive review. The document is developed for use by physiotherapists, physicians, athletic trainers, massage therapists and other health professionals as well as team coaches and strength/conditioning managers involved in care of sportspeople or workers with tendinopathy.

44. Adherence Issues for Oral Antineoplastics

http://www.medscape.com/viewarticle/804754

Cancer is the leading cause of death in the United States among men and women younger than 85 years of age.

Nonadherence to antineoplastics is a growing concern because of the increasing number of novel oral targeted anticancer therapies. Many of these agents are administered on a chronic continuous schedule for an indefinite period of time where adherence is crucial to achieve optimal disease control and prolong survival. Many factors are known to contribute to medication nonadherence. Prevention, early detection, and management of adverse drug reactions associated with oral targeted therapies require close vigilance. Knowing how to prevent and manage adverse drug reactions will help clinicians develop strategies to promote patient adherence to oral anticancer treatment regimens. Optimal adherence requires a dynamic patient-provider alliance through education, communication, ongoing monitoring, and follow-up.

Hand-foot syndrome reaction (HFSR) is a significant problem associated with the TKIs axitinib, lapatinib, and also vemurafenib[57,83] and the MKIs, sorafenib and sunitinib.[84,85]

The onset of HFSR usually occurs 2 to 12 days after initiation of therapy and may progress 3 to 4 days later into symmetrical edema and erythema of the palms and soles.[84,85] Symptoms usually precede lesions and may include paresthesias, tingling, burning, and painful sensations on the palms and soles as well as decreased tolerance to contact with hot objects. The lesions are localized and tender and appear as blisters or hyperkeratosis in areas of trauma or friction on the soles of the feet and palms of the hand and sometimes on the elbows as well. The hyperkeratosis typically presents as yellowish, painful, hyperkeratotic plaques localized to the pressure sole areas (heels and metatarsals).

An orthotic device is encouraged for patients with signs of abnormal weight bearing; also, constrictive footwear, excessive friction on the skin when applying lotions, massages, or performing everyday tasks such as typing or using handheld electronic devices should be avoided.

Vigorous exercise that places undue stress on the palms and/or soles of the feet should also be avoided, particularly during the first month of therapy. Patients should be counseled to wear shoes with padded insoles to reduce pressure on the feet and to wear thick cotton gloves or socks to prevent injury and keep the palms and soles dry.

45. Biopsychosocial Care and the Physiotherapy Encounter

http://www.medscape.com/viewarticle/782158

Conclusions As psychosocial issues, alongside biomechanical factors, command a prominent place within the back pain consultation, physiotherapists may benefit from further specific training and mentoring support in identifying specific strategies for combining the best of traditional physiotherapy approaches with greater focus on patients' beliefs, fears and social context.

Physiotherapists found patients' unrealistic expectations about the likely success of treatment difficult to manage during consultations. Although they recognised the importance of discussing psychosocial obstacles to recovery with patients, they also stressed that patients had a duty to follow the physiotherapy advice and acknowledge responsibility for their own LBP rehabilitation.

B5997: You certainly get a gut feel of the ones that you're wasting your time on…They perhaps think they're coming to me for a massage or something to be done to them to make them feel better, and I won't go along that line. So they are difficult and there are times when I've had to say "well, look if you don't want to follow what I'm saying I'm afraid I can't help you."

46. Uninterrupted Skin-to-Skin Contact Immediately After Birth

http://www.medscape.com/viewarticle/806325

Oxytocin is one such hormone that has been particularly well studied in relationship to attachment and is often referred to as the "love hormone." It has been shown to increase relaxation, attraction, facial recognition, and maternal care-giving behaviors, all necessary to ensure infant survival. Oxytocin is increased during skin-to-skin contact and levels spike whenever the newborn's hand massages mother's breasts.[5]

47. Predictors and Use of Nonpharmacologic Interventions for Procedural Pain Associated With Turning Among Hospitalized Adults

http://www.medscape.com/viewarticle/804948

This study found that nonpharmacologic interventions were used frequently for turning. The specific interventions used most often included calming voice, information, and deep breathing, ones that can be initiated spontaneously and

Table 3. Frequency of Nonpharmacologic Interventions Used During Turning (n = 1,395)

	%	n
Calming voice	65.7%	917
Information	60.6%	845
Deep breathing	37.9%	528
Gentle touch/hand holding	36.6%	510
Distraction	34.2%	474
Pillow splinting	34.0%	473
Humor	25.9%	361
Massage	15.4%	215
Presence of family/friends	13.7%	191
Therapeutic touch	10.1%	141
Progressive relaxation	8.1%	113
Other	4.7%	65

without specific equipment or training. These data suggest that patients, nurses, and family members may be aware of patients' pain during turning and respond to their increased pain by using nonpharmacologic interventions available in that situation, such as calm voice and deep breathing, Randomized controlled trials are needed that examine the effectiveness of nonpharmacologic interventions for procedural pain, especially considering that some are frequently used in clinical practice.

48. Agreement of General Practitioners With the Guideline-based Stepped-care Strategy for Patients With Osteoarthritis of the Hip or Knee

http://www.medscape.com/viewarticle/782746

Three other frequently-used modalities (massage, manual therapy, and other passive physical therapy treatment modalities, such as cold or heat therapy, ultrasound, laser therapy, or electrotherapy) are not recommended in the SCS, i.e. non-recommended modalities.

PUBMED (59 ARTICLES)

1. The efficacy of massage on short and long term outcomes in preterm infants.

http://www.ncbi.nlm.nih.gov/pubmed/23932956

Infant massage is a developmentally supportive intervention that has been documented for several decades to have a positive effect on both full term and preterm infants. The purpose of this study was to assess the short and long term benefits of massage on stable preterm infants.

Infants who were massaged had significantly lower scores on the PIPP after a heel-stick compared to before the massage and had lower PIPP scores at discharge compared to the control group. Massaged infants had higher cognitive scores at 12 months corrected age. Weight gain, length of stay, breastfeeding duration and motor scores did not differ between groups.

Stable preterm infants benefit from massage therapy given by their mothers and may be a culturally acceptable form of intervention to improve the outcomes of preterm infants.

2. Effects of Anma massage therapy (Japanese massage) for gynecological cancer survivors: study protocol for a randomized controlled trial.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3726337/

Cancer patients and survivors regularly feel anxious about cancer recurrence or death, even after the conclusion of medical treatment, and they are often highly physiologically and psychologically stressed. Massage therapy is one of the most widely used complementary and alternative therapies used in the hope of alleviating such stress and physical and psychological complaints and to improve health-related quality of life. This randomized phase III, two-armed, parallel group, clinical trial was designed after obtaining positive findings in a preliminary study. The primary objective is to verify the effects of continuous Japanese massage therapy, referred to as Anma therapy, for cancer survivors. The secondary objective is to confirm the immediate effects of a single Anma massage session for cancer survivors.

Randomly allocated to two groups (n = 30 each): an Anma massage group receiving a 40-min Anma massage session once weekly over a 2-month intervention period (total of eight Anma massage sessions) and a control group being followed by medical doctors and receiving no Anma massage sessions.

Using the evidence-based findings of this trial, medical professionals should be able to explain the benefits conferred by *Anma* massage to cancer survivors and provide higher-quality information to better inform patients in their decisions about whether to receive such therapy.

3. Rheumatoid arthritis in upper limbs benefits from moderate pressure massage therapy.

http://www.ncbi.nlm.nih.gov/pubmed/23561068

METHODS:
Forty-two adults with rheumatoid arthritis in the upper limbs were randomly assigned to a moderate pressure or a light pressure massage therapy group. A therapist massaged the affected arm and shoulder once a week for a 4-week period and also taught the participant self-massage to be done once daily.

RESULTS:
The moderate pressure vs. the light pressure massage therapy group had less pain and perceived greater grip strength following the first and last massage sessions. By the end of the one month period the moderate pressure massage group had less pain, greater grip strength and greater range of motion in their wrist and large upper joints (elbows and shoulders).

4. Mobilization versus massage therapy in the treatment of cervicogenic headache: a clinical study.

http://www.ncbi.nlm.nih.gov/pubmed/23411644

In this study the effect of cervical mobilizations was compared with that of massage therapy in the management of CGH.

DESIGN:
Thirty-six subjects with CGH, randomly assigned into two groups, participated in the study. The first group was treated with spinal mobilization techniques of the upper cervical spine, while the second group was treated with massage therapy of the neck region. All subjects underwent active neck range of motion, isometric and dynamic strengthening and endurance exercises in two sessions per week for 6 weeks. Pre- and post-treatment outcomes were assessed with means and standard error of the means of measured headache pain intensity, frequency and duration of headache attacks as well as via the functional Neck Disability Index (NDI) and active neck range of motion.

RESULTS:
The results of the study showed significant improvement in all measured variables in each treatment group. Comparison between the two groups showed significant differences in all measured variables after intervention in favor of mobilization techniques with the exception of the functional NDI.

CONCLUSION:
Upper cervical spine mobilization demonstrated more clinical benefits than massage therapy with regard to headache pain parameters and neck mobility for CGH subjects.

5. Six weeks of massage therapy produces changes in balance, neurological and cardiovascular measures in older persons.

http://www.ncbi.nlm.nih.gov/pubmed/23087776

This project assessed the effects of six weeks of TM treatment on balance, nervous system, and cardiovascular measures in older adults.

RESULTS:
The TM group showed significant differences relative to controls in cardiovascular and displacement area/velocity after the week six session, with decreasing blood pressure and increasing stability over time from immediate post-TM to 60 minutes post-TM. The TM group revealed lower H-max/M-max ratios 60-minutes post-treatment. Long-term differences between the groups were detected at week seven in displacement area/velocity and systolic blood pressure.

CONCLUSIONS:
Results suggest six weeks of TM resulted in immediate and long-term improvements in postural stability and blood pressure, compared to a controlled condition.

6. Recent non-interventional advances in cancer pain among Singapore patients.

http://www.ncbi.nlm.nih.gov/pubmed/23052435

A questionnaire was distributed for self-administration by patients while waiting for consultation at the NCC outpatient departments. Literature searches on advances in pain management were conducted, reviewed and discussed.

Pain is a significant symptom in outpatients attending a cancer centre, affecting 41.2% of the patients. Although majority of patients who suffered from pain reported this to doctors, much more medical effort is needed to help patients to relieve their pain and proper complementary therapy could be considered.

7. Reflexology versus Swedish Massage to Reduce Physiologic Stress and Pain and Improve Mood in Nursing Home Residents with Cancer: A Pilot Trial.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3409545/

Cancer is a leading cause of morbidity and mortality in the older population. Demographic trends in the aging of the population, coupled with trends in cancer diagnoses and treatment, will shift much of the care of older cancer survivors to the nursing homes setting.

Two of the most widely accepted manual CAM therapies are reflexology and massage therapy.
Recent reviews suggest that these modalities may have beneficial effects such as decreasing pain and increasing qualify of life in patients who have cancer [4, 5].

The purpose of this pilot study was to investigate and compare the effects of reflexology and Swedish massage therapy on physiologic stress, pain, and mood in older cancer survivors residing in nursing homes.

Results. Both Reflexology and Swedish Massage resulted in significant declines in salivary cortisol and pain and improvements in mood. Conclusions. Preliminary data suggest that studies of Swedish Massage Therapy and Reflexology are feasible in this population of cancer survivors typically excluded from trials. Both interventions were well tolerated and produced measurable improvements in outcomes.
The study has several important limitations.

8. Integrating massage, chiropractic, and acupuncture in university clinics: a guided student observation.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3390215/

Several studies have reported on the health benefits of applying an integrated complementary health care model.

This paper presents the results of pilot research focusing on the observations massage therapy students made about complementary health care education and integration during massage, chiropractic, and acupuncture treatments at two university clinics.

Qualitative observations showed that clinicians and interns educated patients to some degree, but the clinicians were less apt to integrate other modalities than the interns.

Observations support that professional integrity may limit clinicians in their ability to integrate multiple modalities of health care while treating patients. Since it is well established that integration of multiple health care modalities is beneficial to patient health, it is recommended that clinics assist their clinical staff in applying an integrative approach to their practice.

9. Massage therapy for osteoarthritis of the knee: a randomized dose-finding trial.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3275589/

We performed a RCT to identify the optimal dose of massage within an 8-week treatment regimen and to further examine durability of response. Participants were 125 adults with OA of the knee, randomized to one of four 8-week regimens of a standardized Swedish massage regimen (30 or 60 min weekly or biweekly) or to a Usual Care control.
Sample protocol:

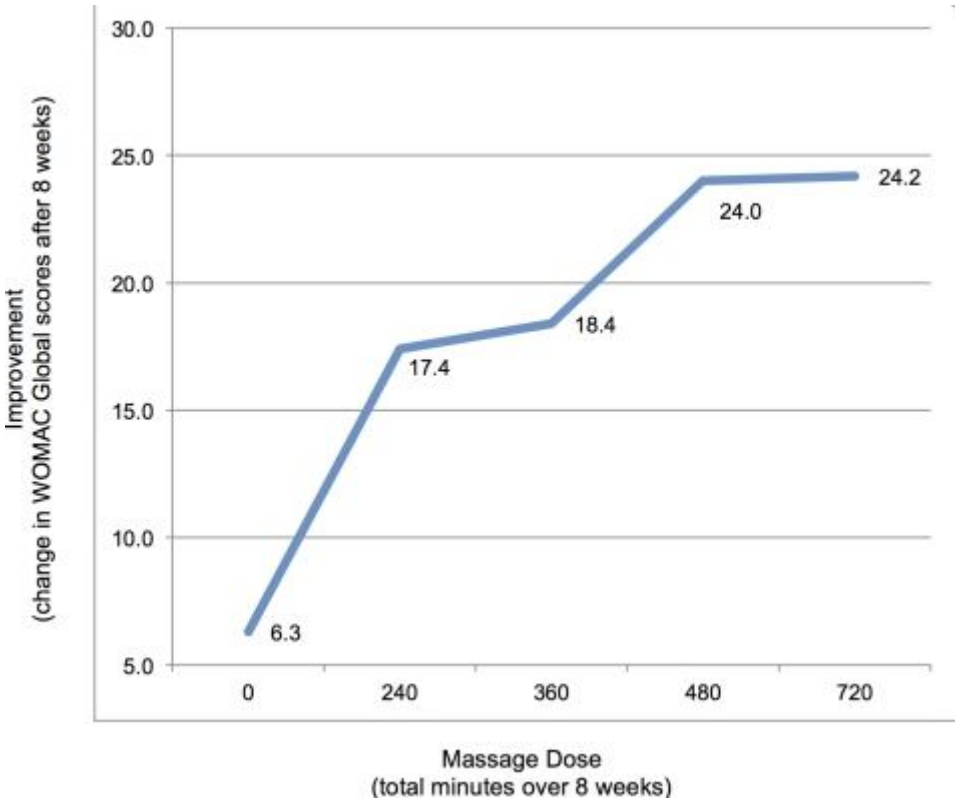
Table 1

30- and 60-Minute Massage Protocols.

30 minute protocol (25 minutes of table time)		
Region	Time Allotted	Distribution
Lower Limbs	12–15 min (45–50% of session)	From knee down including lower leg, ankle, and foot. From knee up including hips, pelvis, buttocks & thigh.
Upper Body	8–12 min (36–44% of session)	Lower and upper back. Head/Neck/Chest
Discretionary	2–5 min (6–19% of session)	Therapist to expand treatment to other affected areas; i.e. rib cage, flank, upper limbs, etc.

60 minute protocol (55 minutes of table time*)		
Lower Limbs	20–27.5 min (45–50% of session)	From knee down including lower leg, ankle, and foot. From knee up including hips, pelvis, buttocks and thigh.
Upper Body	15–24 min (36–44% of session)	Lower and upper back. Head, neck, and chest.
Discretionary	3.5–20 min (6–19% of session)	Therapist to expand treatment to other affected areas; i.e. rib cage, flank, upper limbs, etc.

*Accounting for time spent in transition including the welcome, transition to the massage room, taking off jewelry, and other preparatory activities.



CONCLUSION:
Given the superior convenience of a once-weekly protocol, cost savings, and consistency with a typical real-world massage protocol, the 60-minute once weekly dose was determined to be optimal, establishing a standard for future trials.

10. Tactile stimulation lowers stress in fish.

http://www.ncbi.nlm.nih.gov/pubmed/22086335

In humans, physical stimulation, such as massage therapy, reduces stress and has demonstrable health benefits. Grooming in primates may have similar effects but it remains unclear whether the positive effects are due to physical contact or to its social value. Here we show that physical stimulation reduces stress in a coral reef fish, the surgeonfish Ctenochaetus striatus. These fish regularly visit cleaner wrasses Labroides dimidiatus to have ectoparasites removed. The cleanerfish influences client decisions by physically touching the surgeonfish with its pectoral and pelvic fins, a behaviour known as tactile stimulation. We simulated this behaviour by exposing surgeonfish to mechanically moving cleanerfish models. Surgeonfish had significantly lower levels of cortisol when stimulated by moving models compared with controls with access to stationary models. Our results show that physical contact alone, without a social aspect, is enough to produce fitness-enhancing benefits, a situation so far only demonstrated in humans.

11. Effects of massage on pain, mood status, relaxation, and sleep in Taiwanese patients with metastatic bone pain: a randomized clinical trial.

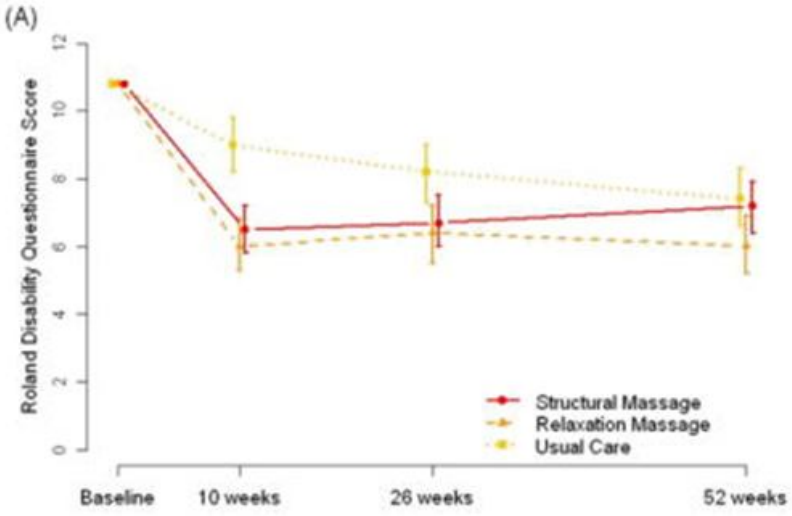
http://www.ncbi.nlm.nih.gov/pubmed/21802850

To date, patients with bony metastases were only a small fraction of the samples studied, or they were entirely excluded. Patients with metastatic cancers, such as bone metastases, are more likely to report pain, compared to patients without metastatic cancer (50-74% and 15%, respectively). Their cancer pain results in substantial morbidity and disrupted quality of life in 34-45% of cancer patients. Massage therapy (MT) appears to have positive effects in patients with cancer; however, the benefits of MT, specifically in patients with metastatic bone pain, remains unknown. The purpose of this randomized clinical trial was to compare the efficacy of MT to a social attention control condition on pain intensity, mood status, muscle relaxation, and sleep quality in a sample (n=72) of Taiwanese cancer patients with bone metastases. In this investigation, MT was shown to have beneficial within- or between-subjects effects on pain, mood, muscle relaxation, and sleep quality. Results from repeated-measures analysis of covariance demonstrated that massage resulted in a linear trend of improvements in mood and relaxation over time. More importantly, the reduction in pain with massage was both statistically and clinically significant, and the massage-related effects on relaxation were sustained for at least 16-18 hours postintervention. Furthermore, massage-related effects on sleep were associated with within-subjects effects. Future studies are suggested with increased sample sizes, a longer interventional period duration, and an objective and sensitive measure of sleep. Overall, results from this study support employing MT as an adjuvant to other therapies in improving bone pain management.

12. A comparison of the effects of 2 types of massage and usual care on chronic low back pain: a randomized, controlled trial.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3570565/

OBJECTIVE: To compare the effectiveness of 2 types of massage and usual care for chronic back pain.



CONCLUSION:

Massage therapy may be effective for treatment of chronic back pain, with benefits lasting at least 6 months. No clinically meaningful difference between relaxation and structural massage was observed in terms of relieving disability or symptoms.

13. Effects of patterns of pressure application on resting electromyography during massage.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3088531/

BACKGROUND:
Over the past few decades, a substantial body of research has accumulated showing that massage therapy is effective in improving health. Chronic back pain, migraines, anxiety, hypertension, depression, and numerous other physical and psychological conditions have been shown to respond positively to massage[1–3]. This type of clinical research is critical if we are to understand the potential of massage therapy as a treatment modality, and for massage to become more recognized and utilized by the mainstream medical establishment.

The purpose here is to increase the understanding of the physiological mechanisms by which massage therapy produces health benefits such as pain relief and anxiety reduction, the relationship between specific elements of massage and physiological outcomes must be addressed.

These results suggest that the physiological response of the muscle depends on the pattern of applied pressure during massage. That finding is consistent with a mechanism by which light- or moderate-pressure massage (or a combination) may reduce the gain of spinal nociceptive reflexes. As those reflexes are elevated in chronic pain syndromes, pressure variation provides a possible mechanism for the relief of chronic pain by massage therapy.

14. Massage therapy after cardiac surgery.

http://www.ncbi.nlm.nih.gov/pubmed/21167456

Cardiac surgery presents a life-saving and life-enhancing opportunity to hundreds of thousands of patients each year in the United States. However, many patients face significant challenges during the postoperative period, including pain, anxiety, and tension. Mounting evidence demonstrates that such challenges can impair immune function and slow wound healing, in addition to causing suffering for the patient. Finding new approaches to mitigate these challenges is necessary if patients are to experience the full benefits of surgery. Massage therapy is a therapy that has significant evidence to support its role in meeting these needs.

15. Does massage therapy reduce cortisol? A comprehensive quantitative review.

http://www.ncbi.nlm.nih.gov/pubmed/21147413

It is frequently asserted that massage therapy (MT) reduces cortisol levels, and that this mechanism is the cause of MT benefits including relief from anxiety, depression, and pain, but reviews of MT research are not in agreement on the existence or magnitude of such a cortisol reduction effect, or the likelihood that it plays such a causative role. A definitive quantitative review of MT's effect on cortisol would be of value to MT research and practice.

CONCLUSIONS:
MT's effect on cortisol is generally very small and, in most cases, not statistically distinguishable from zero. As such, it cannot be the cause of MT's well-established and statistically larger beneficial effects on anxiety, depression, and pain. We conclude that other causal mechanisms, which are still to be identified, must be responsible for MT's clinical benefits.

16. Massage and touch therapy in neonates: the current evidence.

http://www.ncbi.nlm.nih.gov/pubmed/21048258

Infant massage was first introduced in China in 2nd century BC. Massaging the newborn has been a tradition in India and other Asian countries since time immemorial.
Evidence exists supporting the benefits of touch and massage therapy.

The review suggests that massage has several positive effects in terms of weight gain, better sleep-wake pattern, enhanced neuromotor development, better emotional bonding, reduced rates of nosocomial infection and thereby, reduced mortality in the hospitalized patients.

Many studies have described the technique and frequency of this procedure. Massage was found to be more useful when some kind of lubricant oil was used. Harmful effects like physical injury and increased risk of infection were encountered when performed inappropriately.

17. Massage therapy for stress management: implications for nursing practice.

http://www.ncbi.nlm.nih.gov/pubmed/20664464

Unresolved stress has been shown to have numerous adverse effects on the body. A review of the literature has revealed 2 major themes: (1) research that argues that massage has a direct relationship with positive health outcomes and (2) research that stresses that although there are little or no measurable physiological changes that occur from massage, patients' perceptions of stress and anxiety were significantly reduced. The simple act of touch-focused care, even a simple 5-min hand or foot massage, can be useful in lowering a patient's perceived level of stress. Further research is necessary on the benefits and risks of implementing massage therapy in the hospital setting.

18. Moderate pressure is essential for massage therapy effects.

http://www.ncbi.nlm.nih.gov/pubmed/20402578

Moderate pressure appears to be necessary for massage therapy effects. Studies comparing moderate and light pressure massage are reviewed and they suggest that growth and development are enhanced in infants and stress is reduced in adults, but only by moderate pressure massage. The stimulation of pressure receptors leads to increased vagal activity which, in turn, seems to mediate the diverse benefits noted for massage therapy.

19. Massage therapy for fibromyalgia symptoms.

http://www.ncbi.nlm.nih.gov/pubmed/20306046

The existing literature provides modest support for use of massage therapy in treating fibromyalgia. Additional rigorous research is needed in order to establish massage therapy as a safe and effective intervention for fibromyalgia.

20. Preterm infant massage therapy research: a review.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2844909/

Approximately 14% of infants in the United States are born prematurely (National Center for Health Statistics, 2007).

Massage therapy has led to weight gain in preterm infants when moderate pressure massage was provided.

At least one study has documented equivalent effects of professionals and mothers performing the preterm infant massages (Goldstein-Ferber et al, 2002). The Goldstein-Ferber et al (2002) study replicated the results of increased weight gain following massage therapy by both mothers and professionals. In this study, preterm infants were assigned to three groups including one treatment group in which the mothers performed the massage and another in which professionals unrelated to the infant administered the treatment. These two groups were then compared to a control group. Over the 10-day study period, the two treatment groups gained significantly more weight compared to the control group suggesting that mothers were able to achieve the same effect as that of trained professionals. In addition, the mothers who massaged their infants in this study experienced a decrease in depression symptoms, which are often seen in mothers of preterm infants. In our study using mothers as the massage therapists, even one session was effective in lowering both the mothers' depression and anxiety symptoms (Feijo, Hernandez-Reif, Field, Burns, Valley-Gray & Simco, 2006).

The greater weight gain documented by several investigators is associated with 3-6 days shorter hospital stays. A recent cost-benefit analysis suggested a hospital cost savings of approximately $10,000 per infant (or 4.7 billion dollars across the 470,000 preterm infants born each year) (Field, Hernandez-Reif & Freedman, 2004). Despite these benefits, a recent survey revealed that only 38% of NICUs offer infant massage or instruction to parents in infant massage (Field et al., 2004). The same 84 neonatologists polled in this survey suggested that preterm infant massage would not be widely adopted until underlying mechanisms are known.

The use of oils including coconut oil and safflower oil enhanced the average weight gain, and the transcutaneous absorption of oil also increased triglycerides. In addition, the use of synthetic oil increased vagal activity, which may indirectly contribute to weight gain. The weight gain was associated with shorter hospital stays and, thereby, significant hospital cost savings. Despite these benefits, preterm infant massage is only practiced in 38% of neonatal intensive care units. This may relate to the underlying mechanisms not being well understood. The increases noted in vagal activity, gastric motility, insulin and IGF-1 levels following moderate pressure massage are potential underlying mechanisms. However, those variables combined do not explain all of the variance in weight gain, highlighting the need for additional mechanism studies.

21. Massage therapy techniques as pain management for erythromelalgia: a case report.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3088525/

Case study

Erythromelalgia is characterized by temperature-dependent redness, pain, and warmth in one or more extremities. It may be a primary disease, or it may occur secondarily because of underlying illness. It is a chronic, debilitating condition often resistant to medical treatment.

Chronic stress can exacerbate the pathological consequences of erythromelalgia, resulting in physiological or psychological dysfunction. Therapeutic techniques that reduce the consequences of stress—for example, massage therapy (MT)—are therefore beneficial tools for improving overall health[7]. Sleep disturbances are a major factor in many chronic pain syndromes, such as that with erythromelalgia. Therapeutic massage may support restorative sleep so that an optimal environment for healing and restoration may occur in the body. We believe this is the first case report about the use of MT as a treatment method for erythromelalgia.

In this patient with erythromelalgia, effleurage and petrissage as massage therapy techniques provided temporary pain relief in the lower extremities and long-term benefits that relieved anxiety, which improved restorative sleep and increased the patient's participation in activities of daily living.
CONCLUSIONS:

For this treatment protocol, therapist observation and patient feedback suggest that massage therapy may lead to a state of increased relaxation, decreased stress, decreased muscle tension, and improved sleep. These positive effects may have an indirect role in the ability of the patient to cope with erythromelalgia day to day.

22. Benefits of combining massage therapy with group interpersonal psychotherapy in prenatally depressed women.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2785018/

Prenatal depression affects 10% to 50% of women in different samples, with the incidence being higher in low socioeconomic status samples (De Tychey, Splitz, Briancon, Lighezzolo, Girvan, Rosati, Thockler, Vicent, 2005; Stowe, Hostetter, & Newport, 2005).

Neonates of depressed mothers are also at greater risk for being low birthweight (<2500 grams) and small for gestational age (< 10th percentile) (Field et al., 2004a; Hoffman & Hatch, 2000), with low birthweight being one of the leading causes of fetal morbidity and mortality (National Center for Health Statistics, 2006).

Massage therapy had positive effects on prenatally depressed women including decreasing their depression and cortisol levels and decreasing the incidence of prematurity and low birthweight (Field, Diego, Hernandez-Reif, Schanberg, & Kuhn, 2004b). In this study, depressed pregnant women received a 20-minute massage from their significant other twice per week from 20 weeks to 32 weeks gestation. Over the course of the study, the massage group experienced fewer symptoms of depression, and they had lower urinary norepinephrine and cortisol levels and elevated dopamine and serotonin levels

compared to the relaxation and standard care control groups. The massage group also had fewer obstetric and postnatal complications including a lower rate of prematurity. (all Ps<.05)
Massage therapy also contributed to the women's compliance in this study.

The group therapy process, nonetheless, was effective for increasing the display of positive and negative affect and for increasing relatedness in both groups. At least for these changes, the group Interpersonal Psychotherapy was effective.

One hundred twelve pregnant women who were diagnosed depressed were randomly assigned to a group who received group Interpersonal Psychotherapy or to a group who received both group Interpersonal Psychotherapy and massage therapy. The group Interpersonal Psychotherapy (one hour sessions) and massage therapy (30 minute sessions) were held once per week for six weeks.

23. Potential influences of complementary therapy on motor and non-motor complications in Parkinson's disease.

http://www.ncbi.nlm.nih.gov/pubmed/19739693

Nearly two-thirds of patients with Parkinson's disease (PD) use vitamins or nutritional supplements, and many more may use other complementary therapies, yet <50% of patients have discussed the use of these complementary therapies with a healthcare professional. Physicians should be aware of the complementary therapies their patients with PD are using, and the possible effects of these therapies on motor and non-motor symptoms. Complementary therapies, such as altered diet, dietary supplements, vitamin therapy, herbal supplements, caffeine, nicotine, exercise, physical therapy, massage therapy, melatonin, bright-light therapy and acupuncture, may all influence the symptoms of PD and/or the effectiveness of dopaminergic therapy.

24. A survey of complementary and alternative medicine (CAM) awareness among neurosurgeons in Washington State.

http://www.ncbi.nlm.nih.gov/pubmed/19450166

Acupuncture, herbs, massage therapy, prayer, and yoga were the most common CAM treatments patients used or discussed with their neurosurgeon. Fifty percent (50%) of neurosurgeons discussed the use of acupuncture among their colleagues. Concerning prayer and spirituality, 38% of the surveyed neurosurgeons stated that > or =25% of their patients have disclosed that they pray for their health; 42% stated that spirituality and prayer may affect neurosurgery outcome; and 38% stated that they pray for their patients.

25. Effects of therapeutic massage on the quality of life among patients with breast cancer during treatment.

http://www.ncbi.nlm.nih.gov/pubmed/19388859

Using a pre/post intervention assessment design, this prospective, convenience sample pilot study measured anxiety, pain, nausea, sleep quality, and quality of life. Treatment consisted of one 30-minute treatment per week for 3 consecutive weeks.

Participants experienced a reduction in several quality of life symptom concerns after only 3 weeks of massage therapy. Respondents' cumulative pre- and post-massage mean for state anxiety, sleep quality, and quality of life/functioning showed significant improvement. Among study participants, there was variability in reported episodes of nausea, vomiting, and retching; although participants reported decreased pain and distress, changes were non-significant.

Therapeutic massage shows potential benefits for ameliorating the effects of breast cancer treatment by reducing side affects of chemotherapy and radiation and improving perceived quality of life and overall functioning.

26. IN-CAM Outcomes Database: Its Relevance and Application in Massage Therapy Research and Practice.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3091455/

One of the most commonly used complementary and alternative medicine (CAM) modalities in North America is massage therapy (MT). Research to date indicates many potential health benefits of MT, suggesting that ongoing research efforts to further elucidate and substantiate preliminary findings within the massage profession should be given high priority.

For example, specific to the MT field, Moyer and Rounds developed the Attitudes Towards Massage (ATOM) scale[14]. The ATOM scale aims to assess the overall attitude of individuals toward massage based on two key attitudes: massage as “helpful,” and massage as “pleasant.”

27. The effects of employer-provided massage therapy on job satisfaction, workplace stress, and pain and discomfort.

http://www.ncbi.nlm.nih.gov/pubmed/19104272

Long-term care staff have high levels of musculoskeletal concerns. This research provided a pilot program to evaluate the efficacy of employer-funded on-site massage therapy on job satisfaction, workplace stress, pain, and discomfort. Twenty-minute massage therapy sessions were provided. Evaluation demonstrated possible improvements in job satisfaction, with initial benefits in pain severity, and the greatest benefit for individuals with preexisting symptoms. A long-term effect was not demonstrated.

28. Randomised controlled trial of Alexander technique lessons, exercise, and massage (ATEAM) for chronic and recurrent back pain.

http://www.ncbi.nlm.nih.gov/pubmed/19096019

To determine the effectiveness of lessons in the Alexander technique, massage therapy, and advice from a doctor to take exercise (exercise prescription) along with nurse delivered behavioural counselling for patients with chronic or recurrent back pain, with 579 patients.

Exercise and lessons in the Alexander technique, but not massage, remained effective at one year.
One to one lessons in the Alexander technique from registered teachers have long term benefits for patients with chronic back pain. Six lessons followed by exercise prescription were nearly as effective as 24 lessons.

Extra link: http://www.alexandertechnique.com/at.htm

29. Effects of a full-body massage on pain intensity, anxiety, and physiological relaxation in Taiwanese patients with metastatic bone pain: a pilot study.

http://www.ncbi.nlm.nih.gov/pubmed/19070458

(2009) - Randomized clinical trials are needed to validate the effectiveness of MT in this cancer population.

30. Massage therapy versus simple touch to improve pain and mood in patients with advanced cancer: a randomized trial.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2631433/

OBJECTIVE:

To evaluate the efficacy of massage for decreasing pain and symptom distress and improving quality of life among persons with advanced cancer.

Intervention: Six 30-minute massage or simple touch sessions over two weeks.

Conclusion:
Massage may have immediately beneficial effects on pain and mood among patients with advanced cancer. Given the lack of sustained effects and the observed improvements in both study groups, the potential benefits of attention and simple touch should also be considered in this patient population.

31. Fibromyalgia benefits from massage therapy and transcutaneous electrical stimulation.

http://www.ncbi.nlm.nih.gov/pubmed/19078022

Thirty adult fibromyalgia syndrome subjects were randomly assigned to a massage therapy, a transcutaneous electrical stimulation (TENS), or a transcutaneous electrical stimulation no-current group (Sham TENS) for 30-minute treatment sessions two times per week for 5 weeks. The massage therapy subjects reported lower anxiety and depression, and their cortisol levels were lower immediately after the therapy sessions on the first and last days of the study. The TENS group showed similar changes, but only after therapy on the last day of the study. The massage therapy group improved on the dolorimeter measure of pain. They also reported less pain the last week, less stiffness and fatigue, and fewer nights of difficult sleeping. Thus, massage therapy was the most effective therapy with these fibromyalgia patients.

32. Complementary and alternative medicine in the treatment of bipolar disorder--a review of the evidence.

http://www.ncbi.nlm.nih.gov/pubmed/18456339

vidence regarding the benefits of omega-3 fatty acids or acupuncture is inconsistent. Data regarding other CAM interventions (e.g., aromatherapy massage, massage therapy, yoga) are almost entirely lacking. In conclusion, better studies are needed before CAM interventions can be recommended to patients with bipolar disorder. In the meantime, patients need to be informed about the possible risks associated with the use of these interventions.

33. Self-management strategies to reduce pain and improve function among older adults in community settings: a review of the evidence.

http://www.ncbi.nlm.nih.gov/pubmed/18346056

RESULTS:
Retained articles (N = 27) included those that evaluated programs sponsored by the Arthritis Foundation and other programs/strategies including yoga, massage therapy, Tai Chi, and music therapy. Positive outcomes were found in 96% of the studies.

CONCLUSIONS:
Our results suggest that a broad range of self-management programs may provide benefits for older adults with chronic pain. Research is needed to establish the efficacy of the programs in diverse age and ethnic groups of older adults and identify strategies that maximize program reach, retention, and methods to ensure continued use of the strategies over time.

34. Breastfeeding and antidepressants.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2556848/

It is also possible that the positive effects of breastfeeding may outweigh the positive effects of the antidepressants for both the mother and the infant. In addition, some alternative therapies may substitute or attenuate the effects of antidepressants such as vagal stimulation (Chambers & Allen 2002) or massage therapy (Field et al, In press), both therapies being noted to reduce depression. Further studies are needed on the negative side effects of psychotropic medications during breastfeeding and on the side effects of abruptly removing this therapy (Gentile, 2005b).

Although a large literature supports the benefits of breastfeeding, this review suggests that breastfeeding is less common among postpartum depressed women, even though their infants benefit from the breastfeeding. Depressed mothers, in part, do not breastfeed because of their concern about potentially negative effects of antidepressants on their infants. Although sertraline (Zoloft) and paroxetine (Paxol) concentrations are not detectable in infants' sera, fluoxetine (Prozac) and citalopram (Celexa) do have detectable levels. Unfortunately these findings are not definitive because they are based on very small sample, uncontrolled studies. As in the literature on prenatal antidepressant effects, the question still remains whether the antidepressants or the untreated depression itself has more negative effects on the infant. It is possible that the positive effects of breastfeeding may outweigh the positive effects of the antidepressants for both the mother and the infant. In addition, some alternative therapies may substitute or attenuate the effects of antidepressants, such as vagal stimulation or massage therapy, both therapies being noted to reduce depression. Further studies of this kind are needed to determine the optimal course of therapy for the benefit of the depressed, breastfeeding mother and the breastfed infant.

35. Reported effects of non-traditional treatments and complementary and alternative medicine by retinitis pigmentosa patients.

http://www.ncbi.nlm.nih.gov/pubmed/18271780

We assessed CAM use by retinitis pigmentosa (RP) patients and its perceived effectiveness.

We enquired about nine CAM areas: meditation, mind-body therapies, yoga, movement therapies, energy therapies, acupuncture, massage therapy, spirituality/religion and herbal therapies/aromatherapy.

RP patients are self-reportedly using CAM and are experiencing some impact on vision and physical/emotional well-being. Clinicians and researchers should be aware of its use. Clinical trials with CAM interventions are necessary to attempt to validate these findings.

36. Pediatric massage therapy: an overview for clinicians.

http://www.ncbi.nlm.nih.gov/pubmed/18061789

Current findings provide varying levels of evidence for the benefits of pediatric MT in children who have diverse medical conditions; however, anxiety reduction has shown the strongest effect. Future studies should use rigorous study design and methodology, with long-term follow-up, for examining the longitudinal effects of pediatric MT.

37. Side-effects of massage therapy: a cross-sectional study of 100 clients.

http://www.ncbi.nlm.nih.gov/pubmed/17983334

OBJECTIVE:
The purpose of this study was to determine the amount and type of negative side-effects and positive (unexpected) effects experienced after a massage session.

RESULTS:
Overall, 10% of the massage clients experienced some minor discomfort after the massage session; however, 23% experienced unexpected, nonmusculoskeletal positive side-effects. The majority of negative symptoms started less than 12 hours after the massage and lasted for 36 hours or less. The majority of positive benefits began immediately after massage and lasted more than 48 hours. No major side-effects occurred during this study.

CONCLUSIONS:
This the first known study to define the rate of side-effects after massage therapy treatment. These data are important for risk-benefit analyses of massage care. Larger studies are needed to verify these data and to assess effects of different massage types and durations.

38. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society.

http://www.ncbi.nlm.nih.gov/pubmed/17909209

RECOMMENDATION 7 (the last recommendation in the list): For patients who do not improve with self-care options, clinicians should consider the addition of nonpharmacologic therapy with proven benefits- for acute low back pain, spinal manipulation; for chronic or subacute low back pain, intensive interdisciplinary rehabilitation, exercise therapy, acupuncture, massage therapy, spinal manipulation, yoga, cognitive-behavioral therapy, or progressive relaxation (weak recommendation, moderate-quality evidence).

39. Brief report: use of complementary and alternative medicine and psychological functioning in Latino children with juvenile idiopathic arthritis or arthralgia.

http://www.ncbi.nlm.nih.gov/pubmed/17626068

OBJECTIVE:
To describe the use of complementary and alternative medicine (CAM) and its relationship to symptoms of anxiety, depression, and dysthymia in Latino children with juvenile idiopathic arthritis (JIA) or arthralgia.

RESULTS:
CAM was used by the majority of children primarily to treat pain episodes. The most common modalities were prayer and massage therapy. CAM use was associated with decreased symptoms of anxiety and dysthymia in children with arthralgia, but not in children with JIA.

CONCLUSION:
Preliminary findings suggest that CAM use is associated with improved psychological functioning in children with arthralgia. Healthcare providers are encouraged to routinely screen for CAM usage and to educate families about the potential benefits and limitations of CAM.

40. Massage therapy for cancer patients: a reciprocal relationship between body and mind.

http://www.ncbi.nlm.nih.gov/pubmed/17576465

Some cancer patients use therapeutic massage to reduce symptoms, improve coping, and enhance quality of life. Although a meta-analysis concludes that massage can confer short-term benefits in terms of psychological wellbeing and reduction of some symptoms, additional validated randomized controlled

studies are necessary to determine specific indications for various types of therapeutic massage. In addition, mechanistic studies need to be conducted to discriminate the relative contributions of the therapist and of the reciprocal relationship between body and mind in the subject. Nuclear magnetic resonance techniques can be used to capture dynamic in vivo responses to biomechanical signals induced by massage of myofascial tissue. The relationship of myofascial communication systems (called "meridians") to activity in the subcortical central nervous system can be evaluated. Understanding this relationship has important implications for symptom control in cancer patients, because it opens up new research avenues that link self-reported pain with the subjective quality of suffering. The reciprocal body-mind relationship is an important target for manipulation therapies that can reduce suffering.

That study evaluated changes in symptom scores for pain, fatigue, stress and anxiety, nausea, and depression. Participants included 1290 cancer patients and 12 licensed massage therapists. Three variations of massage (selected mainly by the patients) were used: Swedish, light touch, and foot massage. The main outcome measures were data from symptom cards collected by independent observers that were recorded before and after the first session of massage. Symptom scores declined in severity by approximately 50%. Swedish and light touch massage were found to be superior to foot massage. However, the effects of massage were short-term.

41. Effectiveness of massage therapy for chronic, non-malignant pain: a review.

http://www.ncbi.nlm.nih.gov/pubmed/17549233

2.2 Massage Techniques
2.2.1 Western Tradition
Swedish massage consists of continuous systematic strokes and deep kneading and stretching to loosen tight muscles and to reduce stress. The manual techniques specifically include *effleurage* (smooth gliding movements intended to evoke the relaxation response), *petrissage* (lifting, squeezing, wringing, or kneading of soft tissues to stimulate deep muscle and to increase circulation), *friction* (penetrating pressure with fingertips to reduce muscle spasm), and *tapotement* (rapid striking to stimulate tissues). Myofascial release techniques are employed to stretch and relax muscles that are tense or in spasm. Chronically tense muscles restrict blood flow and may be associated with fatigue. By applying specific pressure to connective tissues or fascia, normal alignment and function can be restored and chronic pain eliminated. The technique stretches and releases the fascia to release constriction and spasm, which causes pain.

Soft-tissue release is a technique that uses specific compression and precise extension, administered in a systematic manner, to release muscle spasm and scar tissue.

Trigger-point therapy (**myotherapy**) consists of stretching the myofascial tissue through sustained specific contact with pressure points, which helps to release tension and pain. Myotherapy is the diffusion of trigger points in muscles and the retraining of muscles to relieve pain. Trigger points are

usually found in tight bands of muscle, which may radiate pain to other areas of the body. For instance, relieving a tense trigger point in the back could help to ease pain in the shoulder or to reduce headaches.

Neuromuscular therapy uses static pressure on specific myofascial points to relieve pain. This technique manipulates the soft tissue of the body (muscles, tendons, and connective tissue) and is thought to balance the central nervous system.

Lymphatic drainage is a very slow, light-touch, rhythmic massage that helps the body move lymph throughout the lymphatic vessels. It reduces edema and is described as removing toxins and boosting immunity.

Craniosacral therapy is a treatment approach that focuses on a gentle, hands-on technique used to evaluate and enhance the function of the cranial–sacral system. This hypothetical physiologic body system comprises the membranes and cerebrospinal fluid that surround and protect the brain and spinal cord. Craniosacral treatment is said to enhance the body's natural healing processes, improving the operation of the central nervous system, dissipating the negative effects of stress, enhancing health, and strengthening resistance to disease.

Movement re-education uses slow, rhythmic movements and sustained stretches to help restore and increase the normal range of motion in a joint and surrounding structures, while assisting with muscle relaxation.

2.2.2 Eastern Tradition

Shiatsu, meaning "finger pressure," is a Japanese massage, a form of physical manipulation of acupuncture points and meridians. The latter are thought to channel vital energy. Working on the same principle as acupuncture, practitioners apply pressure to key points known as *tsubos* (Chinese acupuncture points) on the surface of the body to stimulate the flow of energy, called *ki* (*qi* or *chi* in Chinese).

The *ki* flows in meridians beneath the skin. The practitioner works with fingers, thumbs, elbows, knees, and feet along the meridians to remove *ki* blockages or overactivity (called *jitsu*), to restore areas of *ki* depletion (called *kyo*), and to stretch and mobilize limbs to facilitate the flow of *ki*. ***Tui na*** is a similar system derived from Traditional Chinese Medicine.

Acupressure is an ancient Asian healing art that uses the fingers on the surface of the skin to press key points that modulate energy flow through meridians and chakras. Manipulation of energy flow is speculated to stimulate the body's immune system and enhance self-healing.

Reflexology consists of firm pressure to specific points on the feet, hands, or ears. Reflexology is based on the principle that these regions contain links that correspond to every other part of the body.

Jin-shin do is a form of acupressure that was developed in Japan by Jiro Muraim, who mapped out a healing system based on his own body's acupressure points and their responses to energy flow. A

combination of acupressure points called “safety energy locks” is held with the fingers for a minute or more.

Thai massage (*nuad borarn*), is an ancient bodywork system designed to unblock trapped energy and to improve vitality by applying pressure along the meridian channels.

Polarity therapy is a complete system developed by Randolf Stone, a chiropractor and osteopath who believed that illness or pain in the body was cured more readily in concert with awareness and relaxation. The treatments combine therapeutic bodywork, healing intent, dietary adjustments, counselling aimed at awareness, and yoga-style exercises. The term “polarity” describes the basic nature of the hypothesized “electromagnetic force field” of the body.

2.3 Safety of Massage Therapy

Massage administered by a registered (or licensed) massage therapist is very safe; complications are rare [16]. Healthy patients may occasionally experience bruising, swelling of massaged muscles, a temporary increase in muscular pain, or an allergic reaction to skin lubricants. Case reports have documented serious adverse events that include fractures and dislocations, internal hemorrhage and hepatic hematoma [17], dislodging of deep venous thromboses and resultant embolism of the renal artery [18], and displacement of a ureteral stent [19]. Adverse effects were associated mainly with massage delivered by laypeople and with techniques other than Swedish massage.

Practitioners need to be aware of the following special situations with cancer patients:

Coagulation disorders, complicated by bruising and internal hemorrhage
Low platelet count

Medications: coumadin, acetylsalicylic acid, heparin

Metastases to bone, complicated by fracture

Open wounds or radiation dermatitis, complicated by pain and infection

In these situations, avoiding massage or lightening the touch over regions of risk may prevent complications. No evidence suggests that massage therapy can spread cancer, although avoiding direct pressure over a tumour is a sensible precaution.

2.4 Qualifications of the Massage Therapist

Requirements and laws for training and licensing vary from one U.S. state to another and from one Canadian province to another. Education, experience, certification, and licensing are all important credentials. Variation in philosophy and education is typical, and some massage therapists hold the mistaken belief that cancer is a contraindication to massage.

The Commission on Massage Therapy Accreditation in the United States considers 500 hours of training to be a minimum basic requirement. If a therapist is licensed in the United States, the initials lmt (licensed massage therapist) or lmp (licensed massage practitioner) are used after the therapist's name. In non-licensing states, a therapist should have a cmt (certified massage therapist) as the minimum qualification. The letters nctmb indicate that the therapist has voluntarily taken and passed an examination given by the National Certification Board of Therapeutic Massage and Bodywork.

In Canada, the "gold standard" for massage therapy education, as set out by the Canadian Massage Therapists Alliance, demands a minimum of 2200 hours. However, considerable diversity exists in the number of hours of education and in the curricula and the types of educational institutions across the country. Some educational institutions have articulation agreements with universities for degree completion in science at the baccalaureate level.

Increasingly, massage therapy education in Canada is embracing an evidence-informed, outcomes-based model for curricula. Massage therapy is currently a regulated health profession in Ontario, British Columbia, and Newfoundland and Labrador. In the regulated provinces, students must successfully complete written and practical entry-to-practice examinations based on standards of practice set by the regulatory body. Successful applicants are eligible to use the designation MT (massage therapist) or RMT (registered massage therapist) and to qualify for third-party insurance coverage for services. In unregulated provinces and territories, well-organized professional associations impose educational standards similar to those in the regulated provinces. Membership in provincial associations may also include title designation and access to third-party insurance coverage for services.

For massage therapists working with cancer patients, specialized education and experience is essential. Programs for advanced training in massage care of patients with cancer are integrated into undergraduate curricula in the regulated provinces in Canada, and they are also available in continuing education programs in Canada and the United States—for example, at Memorial Sloan–Kettering Cancer Center [20]. Important elements include safety, communication with oncologists, and recordkeeping. Massage therapists are also urged to participate in clinical trials, and courses on research methodology are encouraged.

2.5 Clinical Evidence for the Effectiveness of Therapeutic Massage

The main indications for massage in general practice are back symptoms (20%), relaxation (19%), neck symptoms (17%), mood disorders (7%), and leg symptoms (4%). Therapeutic massage can be effective in treatment programs for pain. The mechanisms for reducing pain may consist of local effects on muscle and effects on the subconscious parts of the brain that control the experience of pain and emotions.

The most common current use of therapeutic massage is in back pain and sports-related injuries. In North America, back pain is reported to occur at least once in 85% of adults under the age of 50. Nearly all of these patients will experience at least one recurrence. Back pain is the second most common illness-related reason given for a missed workday and the most common cause of disability.

Back pain is non-specific in 70%–90% of cases and is associated with overuse or underuse of the back [21]. It manifests as tightening or spasm of the paraspinal muscles. Inflammation and swelling often occur in the joints and ligaments. Injured muscles often meet the diagnostic criteria for the so-called myofascial pain syndrome. Myofascial pain is characterized by muscles in a shortened or contracted state, with increased tone and stiffness. They often contain trigger points (tender, firm, 3-mm to 6-mm nodules that are identified on palpation of the muscles).

The Cochrane Collaboration has reviewed therapeutic massage for non-specific low back pain [22]. The authors concluded that massage therapy may be beneficial for patients with subacute and chronic non-specific low back pain, especially when combined with exercise and education.

The Cochrane Collaboration has also reviewed the role of therapeutic massage and aromatherapy for cancer-related symptoms [6]. They concluded that massage or aromatherapy plus massage confer short-term benefits on psychological wellbeing, with the effect on anxiety supported by limited evidence. Effects on physical symptoms may also occur.

Available evidence is sufficient to indicate that therapeutic massage is a useful discipline for the relief of a variety of symptoms that affect both the body and the mind. Clinical trials of better design are required to determine precise indications for massage and to ascertain whether specific techniques are more beneficial than others for particular symptoms. Mechanistic studies are required to understand the psychophysiologic effects of massage and the influence of those effects on clinical practice.

2.6 The Neuro-myofascial Biology of Touch and Massage
2.6.1 Potential Mechanisms
Therapeutic massage improves local musculoskeletal symptoms and function and can also positively affect mood state and pain threshold. The mechanisms by which massage exerts these multiple therapeutic effects are not yet known.

Manipulation of affected muscles and fascia (as in Swedish massage) induces local biochemical changes that modulate local blood flow and oxygenation in muscle. These local effects may influence neural activity at the spinal cord segmental level and could modulate the activities of subcortical nuclei that influence mood and pain perception. In addition, massage of acupuncture points away from the painful muscles, fascia, and facet joints (as in Japanese shiatsu massage) can also modulate the activities of the limbic system and subthalamic nuclei through poorly understood somatic pathways called meridians. Beneficial late effects are possible through neural plasticity and remodelling.

A meta-analysis of massage therapy research has discussed the limitations of using a medical model and suggests the use of a psychotherapy perspective [8]. The authors concluded that multiple applications of massage therapy reduced delayed assessment of pain and that reductions of trait anxiety and depression are massage therapy's largest effects, with a course of treatment providing benefits similar in magnitude to those of psychotherapy.

It is unclear whether the therapeutic benefits of massage occur primarily as a result of manipulation of muscle and ligaments, or through the brain as a result of interaction with subcortical components of the

nervous system. Those components modulate autonomic functions that influence mood and the perception of pain via the limbic system and brainstem nuclei.

The multiplicity of symptoms relieved suggests that subconscious mechanisms are involved in the therapeutic effects of massage [23–25]. The subconscious or subcortical effects are to be distinguished from the placebo response, which stems from conscious awareness of the procedure. The relative contributions of the body–brain reciprocal relationship have not yet been delineated.

Like acupuncture, some types of massage may influence pain when applied to acupuncture points that are distant from the perceived site of the pain. Unlike therapy applied to pain at the level of the corresponding segment of the spine or dermatome, stimulation of acupuncture points influences central nervous system activity through pathways called meridians, which seem to follow musculoskeletal fascia planes [26,27]. Functional magnetic resonance scanning (fmri), positron emission tomography, and single-photon emission tomography have all demonstrated the effects of acupuncture on subcortical nuclei and the limbic system [28–33]. However, the influence of massage on those locations has not yet been evaluated in the published literature.

We hypothesize that massage alleviates pain through at least two pathways. The first pathway is direct manipulation of soft tissue and its innervations at the level of the involved dermatome. Manipulation of the muscle and fascia may induce local biochemical changes (lactic acid, adenosine triphosphate and phosphocreatinine) and can modulate blood flow and oxygenation of muscle [34–36]. Local changes may influence neural plasticity at the associated segmental level of the spinal cord and the release of neuropeptides (such as calcitonin gene–related peptide) that increase perfusion [37,38]. Myofascial stretching may transduce into electrophysiologic activity that can reduce pain and other symptoms through both a myofascial communication system and afferent neural pathways that modulate the subcortical nuclei and limbic system in the brain [39].

When a peripheral source of pain persists, intrinsic mechanisms that reinforce nociception influence the pain. Chronic pain may be seen as part of a central disturbance accompanied by disinhibition or sensitization of central pain modulation. For example, patients with chronic whiplash syndrome may have a generalized central hyperexcitability from a loss of tonic inhibitory input, contributing to dorsal horn hyperexcitability [40].

Transduction is the process whereby noxious afferent stimuli are converted from chemical to electrical neural messages in the spinal cord that communicate cephalad to the brainstem, thalamus, and cerebral cortex. Noxious mechanical, thermal, and chemical stimuli activate peripheral nociceptors that transmit the pain message through lightly myelinated A-delta fibres and unmyelinated C-fibres. Nociceptors are present in the outer annular fibrosis, facet capsule, posterior longitudinal ligament, associated muscles, and other structures of the spinal motion segment. Nociceptive modulation first occurs in the dorsal horn, where nociceptive afferents converge to synapse on a single dorsal root neuron. Hyperalgesia and allodynia initially develop at the injury site. However, when central sensitization occurs, the area of pain expands beyond the initial region of tissue pathology. Attachment to emotion may increase the perception of pain and could conceivably translate into exacerbation of somatic symptoms [23–25,41,42]. Pain

is motivational and is not only a conscious somatosensory perception but also a motivational feeling attached to the limbic system [43].

Swedish massage may have a direct effect primarily on muscle physiology and metabolism that, in turn, may communicate with the central nervous system through the dorsal horn afferents at the particular dermatome level. In turn, spinothalamic fibres may later activate subcortical nuclei. On the other hand, by manipulating acupuncture points that lie on meridians, shiatsu massage may initially activate sub-thalamic nuclei that can reduce pain and combat other symptoms through both subcortical gating and modulation of the limbic system. Needling of acupuncture points *away* from a painful muscle may have a similar effect on reducing muscle pain through undefined mechanisms [44]. Studying time-dependent changes in the pain behaviour of low back tissues following massage therapy would provide valuable information to compare with time changes associated with mechanisms within the subcortical brain and the spinal segmental level [45].

2.6.2 Noninvasive Techniques to Evaluate the Neuro-myofascial Biology of Touch and Massage

Magnetic resonance spectroscopy (mrs) and fmri are powerful, noninvasive, non-radioactive techniques that may be used to evaluate the biology of manual therapies [46]. These techniques are based on the mechanics and theory of nuclear magnetic resonance (nmr). Signals can be detected only from atomic nuclear species having the quantum mechanical property of spin. The ^{1}H hydrogen atom is the most abundant of these. It provides the signal for routine mri scanning, which produces images using the contrast of water and fat. The mrs technique measures levels of particular chemical species within an acquired tissue volume. It is especially useful for evaluating the physiology of myofascial tissue.
Currently the nuclei of greatest interest are ^{1}H, ^{13}C, and ^{31}P. Techniques that can be used to evaluate muscle physiology include

^{1}H mrs of myoglobin to assess the intracellular partial pressure of oxygen (pO_2),^{31}P mrs to assess metabolic capacity, and the combination of ^{31}P chemical shift imaging to assess local metabolic demand (oxygen uptake:VO_2). Blood oxygenation level–dependent (BOLD) fmri can be used to image the neural correlates of touch and pain within the subcortical nuclei of the brain. This technique allows for indirect estimation of neural activity by detecting local hemodynamic changes, which are closely related to the integrated synaptic activity of nerve cells under physiologic circumstances [46–48].

The pathways and neural centres involved in processing information from low-threshold mechanoreceptors of the skin, carried by fast-conducting myelinated afferent fibres, have been extensively investigated in nonhuman primates. Various cortical regions, including the anterior parietal cortex (primary somatosensory cortex), the lateral and posterior parietal cortices, and motor-related areas responding to mechanical stimuli have been identified [49]. Humans appear to have an expanded somatosensory cortical network. Brain regions showing increased activity during vibrotactile input and tactile recognition extend beyond the parietal lobe to include portions of the frontal, cingulate, temporal, and insular cortices [50]. Available evidence suggests that the central correlates of tactile stimuli vary according to their hedonic qualities. Pleasant touch induces greater activation in the medial orbitofrontal cortex than does more intense, but affectively neutral tactile stimuli [51]. Additional areas activated by pleasant but not by neutral stimuli include a rostral portion of the midcingulate cortex and

an area in or near the amygdala. These findings begin to identify parts of the limbic system that may underlie emotional, hormonal, and affiliative responses to skin contact.

The forebrain pain system partly overlaps structures involved in processing non-noxious input, but painful stimuli induce higher fmri signal increases than non-noxious stimuli do. A direct comparison between the cortical correlates of touch and pain using event-related fmri showed that, besides common activations in the contralateral postcentral gyrus and parietal operculum, pain is associated with stronger involvement of the contralateral midanterior insula, anterior portion of the midcingulate cortex, and dorsolateral prefrontal cortex [52,53].

The autonomic responses to acute pain exposure usually habituate rapidly; the subjective ratings of pain remain high for more extended periods of time. Thus, systems involved in the autonomic response to painful stimulation—for example the hypothalamus and the brainstem—would be expected to attenuate the response to pain during prolonged stimulation. Areas in the brainstem are involved in the initial response to noxious stimulation, which is also characterized by an increased sympathetic response.[54] The perigenual anterior cingulate gyrus is a crucial location for integrating cognitive, emotional, and subconscious activities in the affective dimension of pain [55,56]. Pain-related modulation of fmri signals in other regions involved in reward and emotion circuitry, such as the nucleus accumbens–ventral striatum and the orbitofrontal cortex, has also been demonstrated [51]. Evidence for amplified processing of mechanical stimuli in parietal, insular, and cingulate cortices has been obtained in patients with fibromyalgia, who show characteristically lowered pain thresholds. These studies have begun to shed light on the neural systems involved in central sensitization of nociceptive circuits in pathophysiologic conditions [57,58].

The relative role of cognitive awareness versus subcortical modulation may be deciphered by using distraction and attention methodologies during an fmri examination [58–63]. Attentional effects may be exerted at various levels of the somatosensory system and involve activation of brainstem modulatory centres [62,64].

In a study that employed covariation analysis, a functional interaction was found between the orbitofrontal cortex and perigenual anterior cingulate gyrus, the periaqueductal gray matter and posterior thalamus during pain stimulation and distraction, but not during pain stimulation *per se* [61]. Placebo-induced anticipation of pain relief treatment decreases brain activity in pain-related brain regions [65].

When evaluating the physical effect of massage, psychophysiologic techniques to discriminate between conscious attention and subconscious neurologic interaction are important. The brain networks underlying somatosensory perception are complex and highly distributed. A deeper understanding of perceptual-related and subconscious brain mechanisms therefore requires new approaches suited to investigate the spatial and temporal dynamics of activation in various brain regions and the functional interaction of those regions.

The development and application of refined tools for evaluating functional connectivity between neural populations will provide new insights into bottom-up and top-down mechanisms in somatosensory

perception [53]. Current evidence from fmri suggests that positive and negative tactile stimuli are both represented in the orbitofrontal cortex. The brain region in or near the amygdala is activated by pleasant touch. Most studies of the amygdala have tended to concentrate on its role in negative emotions, such as fear, but other imaging studies have found amygdala activation in response to affectively positive stimuli [51].

Therapeutic massage may transduce mechanical signals through skin sensation, proprioception, and non-noxious muscle perception [60]. How this process translates into local electrophysiologic and chemical changes within muscle and fascia is not clear. Similarly, how therapeutic massage interacts with the central nervous system is not known, although some leads are emerging from research on touch. Preliminary physiologic investigations of muscle and the brain using nmr techniques suggest that therapeutic massage may have distributed effects that can reduce various unpleasant symptoms.

3. CONCLUSION: CHALLENGES FOR THERAPEUTIC MASSAGE RESEARCH

The mechanistic links between manipulation of body tissues and corresponding relief from a broad range of symptoms are not fully understood. The effects are distributed, and reciprocal interplay between the body and mind is evident. We have literally just “touched” the surface of meridian research, but the meridian system appears to be an important communication link between myofascial tissue and the nervous system. This traditional communication system appears to link biochemical, electrical, and physiologic changes in the myofascial tissue with subcortical neurologic activity and changes in cognitive experience. The implications for symptom control in cancer patients are important, opening up new research avenues that link self-reported pain with the subjective quality of suffering. The reciprocal body–mind relationship and its manipulation is an important target for therapies that can reduce suffering.

The U.S. National Center for Complementary and Alternative Medicine held a conference titled The Biology of Manual Therapies during June 9–10, 2005, at the National Institutes of Health (nih) in Bethesda, Maryland [66]. The goal was to define three to five of the most critical research questions involved in gaining an understanding of the biology of manual therapies. Table II outlines the research recommendations. Table III lists current clinical trials involving massage and cancer (found by searching the nih clinical trials database at clinicaltrials.gov). At June 2006, seven studies investigating the effects of massage therapy in cancer patients were registered and active.

More work is required on the methodology for conducting clinical trials of therapeutic massage.
Studied children with mild to moderate juvenile rheumatoid arthritis who were massaged by their parents 15 minutes a day for 30 days (and a control group engaged in relaxation therapy). The children's anxiety and stress hormone (cortisol) levels were immediately decreased by the massage, and over the 30-day period their pain decreased on self-reports, parent reports, and their physician's assessment of pain (both the incidence and severity) and pain-limiting activities.

42. Juvenile rheumatoid arthritis: benefits from massage therapy.

http://www.ncbi.nlm.nih.gov/pubmed/9383925

Studied children with mild to moderate juvenile rheumatoid arthritis who were massaged by their parents 15 minutes a day for 30 days (and a control group engaged in relaxation therapy). The children's anxiety and stress hormone (cortisol) levels were immediately decreased by the massage, and over the 30-day period their pain decreased on self-reports, parent reports, and their physician's assessment of pain (both the incidence and severity) and pain-limiting activities.

43. Randomized controlled trials of pediatric massage: a review.

http://www.ncbi.nlm.nih.gov/pubmed/17342238

The American Massage Therapy Association (AMTA) defines massage as 'manual soft tissue manipulation, [including] holding, causing movement, and/or applying pressure to the body' (14).

As written, this very broad definition includes numerous MT approaches commonly used in clinical practice that are relevant to the current review, but could also include rare forms of medical massage (e.g. optic nerve massage (15), light compressive massage for congenital dacryocystocele (16), cardiac massage (17)), that are outside the intended scope of this review.

Swedish massage uses five main strokes to stimulate the circulation of blood through the body; petrissage (kneading), effleurage (stroking), friction, tapotement (tapping) and vibration.

For the purposes of this review, MT is typified by the manual manipulation of soft tissue, performed by a person other than the recipient, intended to promote health and well-being. This operational definition allows a range of MT styles to be included in this review. Studies vary on many details, including the amount of clothing worn by recipients, whether a massage chair or massage table was used, whether MT took place in a clinical setting or at home, and whether MT was performed by a person with full, partial, or no training as a massage therapist. Studies also vary in which anatomical regions are massaged. Despite all these variations, it is reasonable to expect that there will be some consistent outcomes that result from MT. Eventually, as a scientific understanding of MT grows, studies that examine the importance of these variations will be advisable, but currently the questions of greatest interest are at a more fundamental level.

MT effects can be divided into *single-dose* and *multiple-dose*. Single-dose effects include MT's influence on psychological or physiological states that are transient in nature and that might reasonably be expected to be influenced by a single session of MT. Multiple-dose effects are restricted to MT's influence on variables that are considered to be more enduring, or that would likely be influenced only by a series of MT sessions performed over a period of time, as opposed to a single dose. Frequently, both single- and multiple-dose effects are examined in the same study. One example is a study of MT for autistic children that examined the single-dose effect of MT on salivary cortisol (immediately prior to, and immediately following, an individual session of MT) and the multiple-dose effect of MT on depression (at the beginning of, and at the conclusion of, a sequence of MT sessions over time) (18). A

second example is a study that evaluated children's distress during burn treatment, which included the single-dose effect of MT for state anxiety and the multiple-dose effect of MT for depression (19). Typically, studies include the terms 'short-term effect' and 'long-term effect' to indicate single- and multiple-dose effects, respectively. Our decision to use the *single-dose* and *multiple-dose* terminology is motivated by the desire to prevent any confusion that may arise related to how long an effect may last following the termination of treatment. None of the studies in the current review examine whether any MT effects last beyond the final day on which a participant receives treatment, making the use of the term 'long-term effect' potentially misleading.

The potential benefits of MT can be further classified according to whether they are primarily affective, physiological or behavioral in nature. *Affective* refers to effects most closely associated with the recipients' feelings and emotions. *Physiological* effects are those concerned with recipients' vital organismic processes. *Behavioral* effects are those related to the recipients' observable responses to their environment. Study results reviewed here will first be separated by the single-dose versus multiple-dose distinction, then further categorized into affective, physiological and behavioral dimensions.

Available data reveals that MT provides benefit to pediatric recipients, though not as universally as has sometimes been reported. Benefits from both single-dose and multiple-dose sessions are evident. Most of the statistically significant effect sizes were observed for affective outcomes; findings for the behavioral and physiological dimensions were less consistent. These results parallel known MT effects in adult recipients, where multiple-dose reductions of depression and trait anxiety are the largest effects.
In reviewing MT for pediatric recipients, we encountered several weaknesses endemic to the MT research literature that should be addressed in subsequent studies. These included (i) low statistical power, (ii) frequent failure to report basic descriptive statistics, (iii) descriptions of results that do not logically follow study designs, and (iv) lack of replication. We discuss these in turn.

Conclusion

Current research indicates that MT is not a panacea for conditions studied in the pediatric population. In contrast to what has sometimes been claimed, there is little to no evidence to date to support effects such as improved immune system functioning, reduction of spasticity, or amelioration of hostility. In addition, there is currently scant evidence that MT provides benefits by first reducing cortisol, as MT's effect on this stress hormone is seen to be small when analyzed correctly (i.e. in between-groups as opposed to within-group comparisons). There is, however, a set of MT effects that have been shown to have real value to the pediatric population. MT shows a considerable impact on the state and trait anxiety levels of children. Because these effects are strong, and also because they are consistent with the findings in adults, future research on the anxiolytic effects of MT on pediatric recipients does not need to simply replicate previous studies. The greatest progress can now be made by focusing on the mediators and moderators of MT effects on anxiety, and on testing explanatory theories of these outcomes. MT effects on arthritis pain and muscle tone also appear to be strong, but these results do need to be replicated, as they are based on single studies. Other pediatric outcomes that are promising, but in need of further study, include MT's effects on depression, negative mood, certain types of behavior (likely due to reductions of anxiety) and air flow in those suffering from pulmonary disorders

such as cystic fibrosis. As increased statistical power in the form of additional studies is brought to bear on these potential benefits, it is likely that some will be quantitatively validated.

Finally, it has been noted that prior MT research has not accounted for the communication that inevitably takes place between massage therapists and their recipients, nor has it examined the likelihood that therapists and recipients develop a therapeutic relationship during the course of MT (10). This is also true in pediatric MT studies. MT has important parallels (in both process and outcomes) to psychotherapy (10), a treatment that relies on communication and therapeutic relationship to provide effects. It seems likely that MT effects, especially those belonging to the affective category, are mediated or moderated by these previously unexamined factors. These should not be neglected in subsequent pediatric MT research.

As adult consumers continue to explore and utilize all of their health care options, children will increasingly be recipients of MT. With this in mind, it is essential that we continue to study the benefits of MT for children, and the explanatory models that underlie them, so children's health and wellness can be maximized. The value of MT has been examined for many specific conditions that afflict children. It is our hope that this review has consolidated those findings, indicated areas that require further study, and led to an increased scientific understanding of pediatric MT.

44. Anorexia nervosa symptoms are reduced by massage therapy.

http://www.ncbi.nlm.nih.gov/pubmed/16864390

Nineteen women (M age = 26) diagnosed with anorexia nervosa were given standard treatment alone or standard treatment plus massage therapy twice per week for five weeks. The massage group reported lower stress and anxiety levels and had lower cortisol (stress) hormone levels following massage. Over the five-week treatment period, they also reported decreases in body dissatisfaction on the Eating Disorder Inventory and showed increased dopamine and norepinephrine levels. These findings support a previous study on the benefits of massage therapy for eating disorders.

45. Critical review of how nurses research massage therapy: are they using the best methods?

http://www.ncbi.nlm.nih.gov/pubmed/10025285

Complementary therapies comprise only a fraction of nursing care, yet it is interesting that their use is being considered by an ever-increasing number of nurses. Within the Rhondda NHS Trust, holistic massage therapy is offered to patients both in hospital and in the community, nurses and occupational therapists successfully combining their massage skills with everyday patient care. During the process of devising a research protocol for implementation within the Trust, certain questions began to emerge to which there were no answers. The attempt to answer them is the origin of this paper, which explores some commonly experienced difficulties with reference to the literature and puts forward merits of adapting current methodology to investigate the benefits of massage therapy.

46. Safety and efficacy of massage therapy for patients with cancer.

http://www.ncbi.nlm.nih.gov/pubmed/16062163

Massage therapy, a CAM therapy known primarily for its use in relaxation, may also benefit patients with cancer in other ways. Massage can also be associated with risks in the oncology population. Risks can be minimized and benefits maximized when the clinician feels comfortable discussing CAM with his or her patients. This article reviews and summarizes the literature on massage and cancer to help provide the clinician with information to help facilitate discussions with patients.

CONCLUSIONS:

Conventional care for patients with cancer can safely incorporate massage therapy, although cancer patients may be at higher risk of rare adverse events. The strongest evidence for benefits of massage is for stress and anxiety reduction, although research for pain control and management of other symptoms common to patients with cancer, including pain, is promising. The oncologist should feel comfortable discussing massage therapy with patients and be able to refer patients to a qualified massage therapist as appropriate.

47. Massage therapy versus traditional therapy for low back pain relief: implications for holistic nursing practice.

http://www.ncbi.nlm.nih.gov/pubmed/15923937

This study explored whether there is a significant difference in perceived low back pain relief between patients receiving massage versus traditional therapy, using a 2-variable by 3-variable fully crossed, factorial, comparative research design. Statistical results showed slightly more efficacy for traditional therapy; however, the additional benefits of massage add to its value for holistic nursing practice.

48. Massage therapy in the treatment of lymphedema. Rationale, results, and applications.

http://www.ncbi.nlm.nih.gov/pubmed/15825847

The ongoing NCCAM-supported experimental and clinical translational approaches should shed light not only on the physiologic mechanisms underlying the benefits of massage therapy but could also, if successful in defined populations of patients, have a substantial impact by providing a simpler, more cost-effective LE treatment alternative worldwide.

49. Massage therapy for symptom control: outcome study at a major cancer center.

http://www.ncbi.nlm.nih.gov/pubmed/15336336

Massage is increasingly applied to relieve symptoms in patients with cancer. This practice is supported by evidence from small randomized trials. No study has examined massage therapy outcome in a large group of patients. At Memorial Sloan-Kettering Cancer Center, patients report symptom severity pre- and post-massage therapy using 0-10 rating scales of pain, fatigue, stress/anxiety, nausea, depression and "other." Changes in symptom scores and the modifying effects of patient status (in- or outpatient) and type of massage were analyzed. Over a three-year period, 1,290 patients were treated. Symptom scores were reduced by approximately 50%, even for patients reporting high baseline scores. Outpatients improved about 10% more than inpatients. Benefits persisted, with outpatients experiencing no return toward baseline scores throughout the duration of 48-hour follow-up. These data indicate that massage therapy is associated with substantive improvement in cancer patients' symptom scores.

50. Postoperative arm massage: a support for women with lymph node dissection.

http://www.ncbi.nlm.nih.gov/pubmed/15108949

OBJECTIVE:
To evaluate the usefulness of arm massage from a significant other following lymph node dissection surgery.

CONCLUSION:
Arm massage decreased pain and discomfort related to surgery, and promoted a sense of closeness and support amongst subjects and their significant other. IMPLICATION FOR NURSING PRACTICE: Postoperative massage therapy for women with lymph node dissection provided therapeutic benefits for patients and their significant other. Nurses can offer effective alternative interventions along with standard procedures in promoting optimal health.

51. A meta-analysis of massage therapy research.

http://www.ncbi.nlm.nih.gov/pubmed/14717648

Massage therapy (MT) is an ancient form of treatment that is now gaining popularity as part of the complementary and alternative medical therapy movement. A meta-analysis was conducted of studies that used random assignment to test the effectiveness of MT. Mean effect sizes were calculated from 37 studies for 9 dependent variables. Single applications of MT reduced state anxiety, blood pressure, and heart rate but not negative mood, immediate assessment of pain, and cortisol level. Multiple applications reduced delayed assessment of pain. Reductions of trait anxiety and depression were MT's

largest effects, with a course of treatment providing benefits similar in magnitude to those of psychotherapy. No moderators were statistically significant, though continued testing is needed. The limitations of a medical model of MT are discussed, and it is proposed that new MT theories and research use a psychotherapy perspective.

52. Premature infant massage in the NICU.

http://www.ncbi.nlm.nih.gov/pubmed/12795507

Infant massage therapy is an inexpensive tool that should be utilized as part of the developmental care of the preterm infant. Nurses have been hesitant to begin massage therapy for fear of overstimulating the infant and because there has been insufficient research to prove its safety. Recent research, however, has shown that the significant benefits of infant massage therapy far outweigh the minimal risks. When infant massage therapy is properly applied to preterm infants, they respond with increased weight gains, improved developmental scores, and earlier discharge from the hospital. Parents of the preterm infant also benefit because infant massage enhances bonding with their child and increases confidence in their parenting skills. This article discusses the benefits and risks of massage for preterm infants and their families and explains how to implement massage therapy in the neonatal intensive care setting.

53. A review of the evidence for the effectiveness, safety, and cost of acupuncture, massage therapy, and spinal manipulation for back pain.

http://www.ncbi.nlm.nih.gov/pubmed/12779300

BACKGROUND:
Few treatments for back pain are supported by strong scientific evidence. Conventional treatments, although widely used, have had limited success. Dissatisfied patients have, therefore, turned to complementary and alternative medical therapies and providers for care for back pain.

CONCLUSIONS:
Initial studies have found massage to be effective for persistent back pain. Spinal manipulation has small clinical benefits that are equivalent to those of other commonly used therapies. The effectiveness of acupuncture remains unclear. All of these treatments seem to be relatively safe. Preliminary evidence suggests that massage, but not acupuncture or spinal manipulation, may reduce the costs of care after an initial course of therapy.

54. Outcomes of touch therapies during bone marrow transplant.

http://www.ncbi.nlm.nih.gov/pubmed/12564350

OBJECTIVE:
To investigate the effects of Therapeutic Touch and massage therapy on the outcomes of engraftment time, complications, and perceived benefits of therapy during bone marrow transplant.

CONCLUSIONS:
Massage therapy may be effective in altering the psychological and neurological complications associated with chemotherapy during bone marrow transplant. Both massage and Therapeutic Touch provide comfort to patients undergoing this challenging process.

55. A primer of complementary and alternative medicine and its relevance in the treatment of mental health problems.

http://www.ncbi.nlm.nih.gov/pubmed/12418362

The use of complementary and alternative medicine (CAM) is widespread. Those with psychiatric disorders are more likely to use CAM than those with other diseases. There are both benefits and limitations to CAM. Many controlled studies have yielded promising results in the areas of chronic pain, insomnia, anxiety, and depression. There is sufficient evidence, for example, to support the use of a) acupuncture for addiction problems and chronic musculoskeletal pain, b) hypnosis for cancer pain and nausea, c) massage therapy for anxiety, and the use of d) mind-body techniques such as meditation, relaxation, and biofeedback for pain, insomnia, and anxiety. Large doses of vitamins, herbal supplements, and their interaction with conventional medications are areas of concern. Physicians must become informed practitioners so that they can provide appropriate and meaningful advice to patients concerning benefits and limitations of CAM.

56. A regional survey of health insurance coverage for complementary and alternative medicine: current status and future ramifications.

http://www.ncbi.nlm.nih.gov/pubmed/11439848

OBJECTIVE:
The purpose of this survey is to evaluate the extent of health insurance coverage for complementary and alternative medicine (CAM) within one region in the United States, a study prompted by the increased utilization of CAM.

CONCLUSIONS:
Current health insurance coverage of CAM is limited essentially to chiropractic medicine, acupuncture and massage therapy. Coverage of CAM is made confusing by different policies, practitioner requirements, and health plans within each carrier.

57. Benefits of massage therapy and use of a doula during labor and childbirth.

http://www.ncbi.nlm.nih.gov/pubmed/10631824

This article reviews the most recent literature on touch support and one-to-one support during labor and childbirth. The positive and negative aspects of the traditional birth attendant are presented. Research in one-to-one care and touch support during labor is examined with respect to husband/partner, nurses, nurse-midwives, and doulas (trained labor attendants). According to recent studies, women supported by doulas or midwives benefit by experiencing shorter labors and lower rates of epidural anesthesia and cesarean section deliveries. Also, a smaller percentage of their newborns experience fetal distress and/or are admitted to neonatal intensive care units. Women whose husbands or partners massage them during labor experience shorter labors. Nursing one-to-one support results in no significant obstetric outcomes. Antenatal perineal massage was found to reduce the rates of tears, cesarean section, and instrumental deliveries. Research in perineal massage during labor has shown no benefit.

59. Benefits of massage therapy for hospitalized patients: a descriptive and qualitative evaluation.

http://www.ncbi.nlm.nih.gov/pubmed/10394676

OBJECTIVE:
To uncover and elucidate a range of patient outcomes of a therapeutic massage program within an acute care setting.

CONCLUSIONS:
The study supported the value of this hospital-based massage therapy program and uncovered a range of benefits of massage therapy for hospitalized patients that should be studied further.