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## Massage therapy for fibromyalgia symptoms

L Kalichman.

Review published: 2010.

### CRD summary

This review concluded that there was modest support for the use of massage therapy for symptom relief in patients with fibromyalgia. The review suffered from several methodological limitations, including the potential for error and bias in the search and review processes, together with the unclear quality of included studies. Consequently, the reliability of the author's conclusion is uncertain.

### Authors' objectives

To assess the effectiveness of massage therapy for symptom relief in patients with fibromyalgia.

### Searching

PubMed, CINAHL, PsycINFO, PEDro and Web of Science databases were searched from inception to December 2009 for published studies in any language. Search terms were reported. Google Scholar was also searched. Reference lists of retrieved articles were scanned and field experts were contacted to identify further studies.

### Study selection

All studies of any type of massage or soft tissue mobilisation that reported at least one outcome relating to pain or function in patients with fibromyalgia were eligible for inclusion.

The review included single-arm studies and randomised controlled trials (RCTs) of male and female patients with a mean age that ranged from 37.9 to 50.9 years (where reported). Pain duration ranged from 8.1 years to 16.9 years (where reported). Types of massage included manual lymphatic drainage, Mechanical (Cellu M6), Swedish or Shiatsu, and connective tissue massage with or without combined ultrasound therapy. The number of procedures ranged from 10 to 15, with a treatment duration that ranged from 20 and 60 minutes (where reported). Some control groups received transcutaneous electrical nerve stimulation (TENS), Sham TENS, progressive muscle relaxation, standard care with or without telephone follow-up, or no treatment. A variety of outcomes relating to pain and function were assessed in the short-term (end of treatment) and long-term (at six months follow-up).

The author did not state how many reviewers selected the studies.

### Assessment of study quality

The author did not give details of any formal quality assessment of the included studies.

### Data extraction

Data were extracted on short-term and long-term outcomes and reported in terms of magnitude of effect. P-values were presented to indicate the level of statistical significance.

The author did not state how many reviewers extracted the data.

### Methods of synthesis

A narrative synthesis was presented.

### Results of the review

The author stated that two single-arm studies (n=27) and six RCTs (n=208) were included in the review, although three single arm studies (n=47) and seven RCTs (n=248) were included in the discussion of results.

Five RCTs demonstrated statistically significant short-term benefits of massage therapy.

The author reported that four single-arm studies reported significant short-term benefits for pain, stiffness, sleep quality, fatigue, and 24-hour urinary concentration of the corticotropin releasing factor-like immunoreactivity. Two of these studies also reported sustained improvements at six and 12 months.

### Authors' conclusions

The available literature provided modest support for the use of massage therapy in treating patients with fibromyalgia.

### CRD commentary

The research question for this review was addressed with broad inclusion criteria. Relevant data sources were searched, but restriction to published studies means that publication bias could not be ruled out. It was not clear how many reviewers were

involved in the review process, so transparency could not be assured and the review was susceptible to errors and bias.

Although the author referred to the poor methodological quality of included studies, this could not be verified. The number of included studies differed between tables and text; one study was described as both a single-arm study and an RCT. Although study details were provided for all, these anomalies potentially undermine the systematic nature of the review. The contribution of studies without a control group limited the reliability of the findings.

The author's conclusion reflects the limited evidence presented, but the reliability of this conclusion is substantially compromised by the methodological limitations mentioned above.

### Implications of the review for practice and research

**Practice:** The author stated that massage therapy for patients with fibromyalgia needs to be painless and performed once or twice a week, with intensity increasing gradually according to symptoms.

**Research:** The author stated that rigorous research is needed to ascertain that massage therapy is a safe and effective treatment for patients with fibromyalgia. Patient and therapist blinding, longer-term follow-up, controlling for non-specific effects (such as physical contact and therapist's time and attention), and comparisons of different massage types are recommended in future research.

### Funding

Not stated.

### Bibliographic details

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### Record Status

This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.

## THE UNIVERSITY *of York* Centre for Reviews and Dissemination

CRD has determined that this article meets the DARE scientific quality criteria for a systematic review.

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