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Massage for Low-back Pain: A Systematic Review within the Framework of the Cochrane Collaboration Back Review Group

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Background. Low back pain (LBP) is one of the most common and costly musculoskeletal problems in modern society. Proponents of massage therapy claim it can minimize pain and disability and speed return-to-normal function.

Objectives. To assess the effects of massage therapy for nonspecific LBP.

Search Strategy. We searched MEDLINE, Embase, *Cochrane Controlled Trials Register*, HealthSTAR, CINAHL, and dissertation abstracts through May 2001 with no language restrictions. References in the included studies and in reviews of the literature were screened. Contact with content experts and massage associations was also made.

Selection Criteria. The studies had to be randomized or quasirandomized trials investigating the use of any type of massage (using the hands or a mechanical device) as a treatment for nonspecific LBP.

Data Collection and Analysis. Two reviewers blinded to authors, journals, and institutions selected the studies, assessed the methodologic quality using the criteria recommended by the Cochrane Collaboration Back Review Group, and extracted the data using standardized forms. The studies were analyzed in a qualitative way because of heterogeneity of population, massage technique, comparison groups, timing, and type of outcome measured.

Results. Nine publications reporting on eight randomized trials were included. Three had low and five had high methodologic quality scores. One study was published in German, and the rest, in English. Massage was compared with an inert treatment (sham laser) in one study that showed that massage was superior, especially if given in combination with exercises and education. In the other seven studies, massage was compared with different active treatments. They showed that massage was inferior to manipulation and transcutaneous electrical nerve stimulation; massage was equal to corsets and exercises; and massage was superior to relaxation therapy, acupuncture, and self-care education. The beneficial effects of massage in patients with chronic



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LBP lasted at least 1 year after the end of the treatment. One study comparing two different techniques of massage concluded in favor of acupuncture massage over classic (Swedish) massage.

Conclusions. Massage might be beneficial for patients with subacute and chronic nonspecific LBP, especially when combined with exercises and education. The evidence suggests that acupuncture massage is more effective than classic massage, but this needs confirmation. More studies are needed to confirm these conclusions, to assess the effect of massage on return-to-work, and to measure longer term effects to determine cost-effectiveness of massage as an intervention for LBP.

Key words: systematic review; low back pain; massage; efficacy; effectiveness; Cochrane Collaboration

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