

## Massage therapy in the treatment and management cancer pain

### Cancer Pain

Twelve high quality and four low quality studies were included in a review and meta-analysis of trials using massage therapy for pain in cancer patients. Compared to active comparators, massage therapy was found to be beneficial for pain as well as fatigue and anxiety.

Boyd C, Crawford C, Paat CF, Price A, Xenakis L, Zhang W. The Impact of Massage Therapy on Function in Pain Populations-A Systematic Review and Meta-Analysis of Randomized Controlled Trials: Part II, Cancer Pain Populations. *Pain Med.* 2016;17(8):1553-68.

Twelve studies, including 559 participants, were used in the meta-analysis. In 9 high-quality studies, authors observed reduction in cancer pain after massage. Massage therapy significantly reduced cancer pain compared with no massage treatment or conventional care. Our results indicate that massage is effective for the relief of cancer pain, especially for surgery-related pain. Among the various types of massage, foot reflexology appeared to be more effective than body or aroma massage.

Lee SH, Kim JY, Yeo S, Kim SH, Lim S. Meta-Analysis of Massage Therapy on Cancer Pain. *Integrative Cancer Therapies.* 2015;14(4):297-304.

In a study on the longitudinal impact on metastatic bone pain and anxiety, massage therapy was shown to have immediate effect on present pain intensity (PPI), as well as impact in the short-term (20-30 minutes), intermediate term (1-2.5 hours), and long-term benefits (16-18 hours) on PPI and anxiety.

Jane SW, Wilkie DJ, Gallucci BB, Beaton RD, Huang HY. Effects of a full-body massage on pain intensity, anxiety, and physiological relaxation in Taiwanese patients with metastatic bone pain: a pilot study. *J Pain Symptom Manage.* 2009;37(4):754-763.

### Pediatric

Thirty children with cancer and or blood diseases were randomized to either receive massage therapy or no MT: four MT session either daily (inpatient) or weekly (outpatient). Significant physical improvements were experienced by the MT group on muscle soreness, discomfort, respiratory rate, and overall progress.

Haun JN, Graham-Pole J, Shortley B. Children with cancer and blood diseases experience positive physical and psychological effects from massage therapy. *Int J Ther Massage Bodywork.* 2009;2(2):7-14

In a trial using massage therapy with acupressure for hospitalized children undergoing hematopoietic cell transplantation, where massage was delivered both by practitioners and parents trained in a massage protocol. The children experienced relief from pain and nausea, increased relaxation, and greater ease falling asleep. Authors also reported increased caregiver competence and closeness with their child as a result of learning and performing massage/acupressure.

Ackerman SL, Lown EA, Dvorak CC, et al. Massage for children undergoing hematopoietic cell transplantation: a qualitative report. *Evid Based Complement Alternat Med.* 2012;792042.