

## Literature search – Therapeutic Massage

There are many references reporting on the benefit of massages on adult cancer patient. Below are a few examples of such benefits “manually” selected.

### Breast Cancer:

In their review (Greenlee, DuPont-Reyes et al. 2017) provides updated clinical practice guidelines from the Society for Integrative Oncology (SIO) on the use of integrative therapies for specific clinical indications during and after breast cancer treatment including Depression and/or mood disturbances. Depression and/or mood disturbances may occur both during and after cancer therapy. Patients may experience symptoms of depression, as they often feel a sense of loss of health and the life they had before their cancer diagnosis. Symptoms of depression in cancer patients may include persistent feelings of sadness, numbness, nervousness, guilt, worthlessness, helplessness or hopelessness, difficulty concentrating or behavior that includes being short-tempered or moody, crying for long periods of time or many times each day, lacking interest or pleasure in performing activities, and having suicidal thoughts. They analyzed 6 trials which took place in the United States, Germany, England, and Spain, all included breast cancer survivors who had completed active cancer treatment at least three months prior to study enrollment. The study sample sizes ranged from 20 to 288 participants. Across these studies, compared with control groups, women in the intervention group reported significant improvement in mental health outcomes, including reduced depression and mood disturbance scores particularly in relation to anxious depression, anger, and tiredness. The authors concluded that massage therapy is recommended to improve mood disturbance in breast cancer survivors following active treatment (i.e., surgery, chemotherapy, radiation).

In a their systematic review (Wang, Zhai et al. 2021), selected and analyzed 10 Randomized controlled trials (RCTs) studies undertaken in the United States, Germany, China, Spain, Turkey, and Iran with 1,040 cumulated randomized participants. Four massage therapy modalities were identified in the review (reflexology, Swedish massage, Chinese massage and myofascial therapy).. Massage therapy was found to have a positive effect on fatigue management compared with routine care/wait list control groups and sham massage. Despite these encouraging findings, more rigorously designed, large-scale, sham-controlled RCTs are needed to further conclude the specific therapeutic effectiveness and safety issues of massage therapy for fatigue management.

### Head and Neck Cancer

In their randomized controlled phase II study (Yang, Feng et al. 2021) investigated the efficacy, safety and underlying mechanism of maxillofacial and oral massage in nasopharyngeal carcinoma (NPC) patients receiving intensity-modulated radiotherapy.

A total of 158 NPC patients were randomly assigned 1:1 to routine oral care and medication (the control group) or routine oral care and medication with additional maxillofacial and oral massage (the treatment group). The addition of maxillofacial and oral massage significantly attenuated the incidence of severe radiotherapy-induced oral mucositis in NPC patients (26.3% in the treatment Group vs. 46.8% in the control group,  $P = 0.008$ ). The adverse events in the treatment group were slight and tolerant. The addition of enhanced anti-inflammatory lipid metabolites, which might be an underlying mechanism.

## General

More generally, for any type of cancer, massage has been shown to be beneficial to manage depression and mood disorders and to be a treatment option for pain and fatigue (Mao, Pillai et al. 2022).

In their systematic review of the randomized controlled trials (Samuel, Gururaj et al. 2021), selected and analyzed 4 RCTs studying massage therapy in cancer survivors who experience sleep disturbances. The studies showed statistically significant improvement in self-reported sleep questionnaires and objectively recorded long sleep episodes in cancer survivors. It is however, noted future studies should examine the long-term feasibility of massage therapist-delivered services, particularly for cancer survivors with limited finances, and determine if benefits can be obtained if massage is provided by non-certified individuals.

The Cancer Council in Australia recommends massage for cancer patients who have had surgery and chemotherapy for the reduction of pain, anxiety, depression. Patients also reported improvements in sleep, scarring, quality of life, memory, alertness, and ease of movement.<sup>1</sup>

The American Association of Therapeutic Massage has published a complete guide on the benefits of massage for all kinds of pathologies, including cancer. Studies have supported the helpful role of massage therapy in reducing cancer-related discomfort and managing pain from various types of cancer, including metastatic cancer, colorectal cancer, and breast cancer.<sup>2</sup>

## References

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<sup>1</sup> <https://www.cancer.org.au/assets/pdf/massage-and-cancer>

<sup>2</sup> <https://www.amtamassage.org/publications/massage-therapy-integrative-care-pain-management/>