

How Can Acupuncture Help to Support People During Chemotherapy and Radiotherapy?

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Acupuncture is an ancient form of therapy which originated in China over two thousand years ago. Today acupuncture is practiced widely not only in Asian countries such as China, Japan, Korea, Vietnam and India, but also across Europe, North and South America, and in Australia and New Zealand. Since July 2012 acupuncture has become a nationally registered health profession regulated by the Australian Health Practitioners Regulation Agency (AHPRA) which also regulates the other health professions including medicine, nursing, pharmacy and physiotherapy.

Acupuncture has been extensively researched to date with over 5,000 controlled trials published. Research has found acupuncture to be a safe and effective treatment for a variety of conditions, and now a growing body of evidence indicates that acupuncture may be helpful in a number of ways for people with cancer who are receiving chemotherapy or radiotherapy.

The main areas in which acupuncture's effects have been studied include fatigue, nausea and vomiting with low appetite, cancer pain, confusion (sometimes called "chemo-brain"), sleep disturbance, mood disorders (including mild depression and anxiety), hot flushes (in breast and prostate cancer), constipation, dry mouth ("xerostomia" after damage to salivary glands during head and neck therapy), immune suppression and peripheral neuropathy.

A recent multi-centre trial studied more than 300 women with breast cancer being treated at nine treatment centres across the United Kingdom. In addition to the usual care, randomly selected women also received weekly acupuncture treatments for six weeks. After the acupuncture treatment these women reported feeling better than the usual care group in terms of fatigue, anxiety, depression and quality of life measures such as functional well-being, emotional well-being and social functioning.

A Cochrane systematic review which analysed the results of 11 studies on post-chemotherapy nausea and vomiting found that acupuncture was safe and effective in reducing nausea. Some acupressure studies were included in this review and acupressure was also found to be helpful to reduce nausea. Although there are no specific studies which show that acupuncture can improve appetite, this has been a traditional use of acupuncture for over two thousand years and improvement in appetite is often reported in clinical practice.

No studies have been done to date on acupuncture for "chemo-brain", a confusional state which can occur during and after chemotherapy. However there are reports from some patients that their mental function (especially concentration and short-term memory) has improved after acupuncture. Acupuncture treatment to improve concentration and short-term memory have also been discussed in the historical literature.

It is relatively common for the immune system to be suppressed by chemotherapy and this can leave people vulnerable to catching infections. Acupuncture has been shown to prevent

the decline of T cells and Natural Killer cells during chemotherapy. More research is needed in this area.

Some early studies have been conducted on the effects of acupuncture on peripheral neuropathy following chemotherapy and a study on this topic is currently in the planning stages in Brisbane.

In Australia to date, acupuncture has been used in conjunction with chemotherapy and radiotherapy in Brisbane at the Mater Hospital in a programme run by acupuncturist and nurse, Chris McKeon. In Melbourne, Prof Marc Cohen from RMIT University has been using acupuncture working with breast cancer patients. At the Sydney Cancer Centre, until recently, Dr Byeung Sang Oh was using acupuncture for cancer patients, however Dr Oh is now working as a post-doctoral research fellow at Harvard University.

- **fatigue,**
- **nausea, vomiting**
- **poor appetite**
- **pain**
- **confusion**
- **sleep disturbance**

- **anxiety, depression**
- **hot flushes**
- **dry mouth**
- **constipation**
- **immune suppression**
- **peripheral neuropathy**

References

Cohen, A., Menter, A., & Hale, L. (2005). Acupuncture: role in comprehensive cancer care - a primer for the oncologist and review of the literature. *Integrative Cancer Therapies*, 4(2), 131-143.

Ezzo, J., Richardson, M., Vickers, A., Allen, C., Dibble, S., Issell, B., Lao, L., Pearl, M., Ramirez, G., Roscoe, J., Shen, J., Shivnan, J., Streitberger, K., Treish, I., Zhang, G. . (2011). Acupuncture-point stimulation for chemotherapy-induced nausea or vomiting. *Cochrane Database of Systematic Reviews: Reviews 2011*.

Garcia MK, McQuade J, Haddad R, Patel S, Lee R, Yang P, Palmer JL, Cohen L. (2013) Systematic Review of Acupuncture in Cancer Care: A Synthesis of the Evidence. *J Clin Oncol*. 2013 Jan 22

Lee, H., Schmidt, K., & Ernst, E. (2005). Acupuncture for the relief of cancer-related pain - a systematic review. *European Journal of Pain*, 9(4), 437-444.

Lu, W. (2005). Acupuncture for Side Effects of Chemoradiation Therapy in Cancer Patients. *Seminars in Oncology Nursing*, 21(3), 190-195.

Molassiotis A, Bardy J, Finnegan-John J, Mackereth P, Ryder DW, Filshie J, Ream E, Richardson A. (2012) Acupuncture for cancer-related fatigue in patients with breast cancer: a pragmatic randomized controlled trial. *J Clin Oncol*. 2012 Dec 20;30(36):4470-6.

Smith, J., & Pilkington, K. (2004). Acupuncture therapy - why and how is it used in cancer patients? *Complementary Therapies in Medicine*, 12(2-3), 153-154.

Vickers, A., Straus, D., Fearon, B., & Cassileth, B. (2004). Acupuncture for postchemotherapy fatigue: a phase II study. *Journal of Clinical Oncology*, 22(9), 1731-1735.

Ye, F., Chen, S., & Liu, W. (2002). Effects of Electro-Acupuncture on Immune Function After Chemotherapy in 28 Cases. *Journal of Traditional Chinese Medicine*, 22(1), 21-2