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The Australasian Integrative Medicine Association (AIMA) is a national, voluntary nonprofit organisation and is the peak medical body that promotes the safe integration of holistic and complementary medicine with current mainstream medical practice, in pursuit of complete whole person care. [www.aima.net.au](http://www.aima.net.au)

# Complementary medicine in palliative care

**This is the eighth of a series of articles looking at the available evidence for complementary medicine relating to the theme topic in *Australian Family Physician*.**

For patients facing an incurable and life threatening illness such as cancer, decisions that lead to the use of complementary and alternative medicines (CAM) are often seen as pragmatic and a last resort when mainstream medicine has nothing left to offer.

## Pain, dyspnoea, nausea and vomiting

Original articles were evaluated following a search of MEDLINE, CancerLIT, AIDSLINE, PsycLIT, CINAHL, and Social Work Abstracts databases.<sup>1</sup> Search terms included: alternative medicine, palliative care, pain, dyspnoea, and nausea. Two independent reviewers extracted data, including study design, subjects, sample size, age, response rate, CAM, and outcomes.

The efficacy of a CAM was evaluated in 21 studies of symptomatic adult patients with incurable conditions. Of these, only 12 were directly accessed via literature searching. Eleven were randomised controlled trials, two were nonrandomised controlled trials, and eight were case series. Complementary and alternative medicines such as acupuncture, transcutaneous electrical nerve stimulation, supportive group therapy, self hypnosis, and massage therapy were concluded by the authors as useful in providing pain relief in cancer pain or in dying patients. The authors also concluded that relaxation/imagery can improve oral mucositis pain. Patients with severe chronic obstructive pulmonary disease may benefit from the use of acupuncture, acupressure, and muscle relaxation with breathing retraining to relieve dyspnoea.

The authors note that because of publication bias, trials on CAM may not be found on routine literature searches. Despite the paucity of controlled trials, it was concluded that there are data to support the use of some CAM in terminally ill patients. This review generated evidence based recommendations and identified areas for future research.

## Omega-3 polyunsaturated fatty acids plus vitamin E

This prospective, randomised controlled study<sup>2</sup> investigated the effect of dietary omega-3 polyunsaturated fatty acids

(PUFA) plus vitamin E on the immune status and survival of well nourished and malnourished patients with generalised malignancy. Sixty patients with generalised solid tumours were randomised to receive dietary supplementation with either fish oil (18 g of omega-3 PUFA) or placebo daily until death. Each group included 15 well nourished and 15 malnourished patients. Primary endpoints included total T cells, T-helper cells, T-suppressor cells, natural killer cells, and the synthesis of interleukin-1, interleukin-6, and tumour necrosis factor by peripheral blood mononuclear cells before and on day 40 of fish oil supplementation. Endpoints with significant interest included Karnofsky performance status, nutritional state and survival.

Results showed that the ratio of T-helper cells to T-suppressor cells was significantly lower in malnourished patients. Omega-3 PUFA had a considerable immunomodulating effect by increasing this ratio in the subgroup of malnourished patients. There were no significant differences in cytokine production among the groups, except for a decrease in tumour necrosis factor production in malnourished cancer patients, which was restored by omega-3 fatty acids. Mean survival was significantly higher for the subgroup of well nourished patients in both groups. Further, omega-3 fatty acids prolonged the survival of all the patients.

Given that malnutrition appears to be an important predictor of survival for patients with end stage malignant disease, this study significantly showed that omega-3 PUFA had a significant immunomodulating effect and seemed to prolong the survival of malnourished patients with generalised malignancy.

Conflict of interest: none declared.

## References

1. Pan CX, Morrison RS, Ness J, Fugh-Berman A, Leipzig RM. Complementary and alternative medicine in the management of pain, dyspnea, and nausea and vomiting near the end of life: a systematic review. *J Pain Symptom Manage* 2000;20:374-87.
2. Gogos CA, Ginopoulos P, Salsa B, Apostolidou E, Zombos NC, Kalfarentzos F. Dietary omega-3 polyunsaturated fatty acids plus vitamin E restore immunodeficiency and prolong survival for severely ill patients with generalised malignancy. A randomised control trial. *Cancer* 1998;82:395-402.



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