# Integrative management of nausea and vomiting

Nausea and vomiting are common symptoms seen in general practice. This article provides a brief overview of some integrative therapies that have demonstrated benefit in the management of these symptoms, specifically nausea induced by pregnancy, chemotherapy and surgery.

### **Chemotherapy related nausea**

A 2006 Cochrane review by Ezzo et al<sup>1</sup> analysed data from 11 randomised trials of acupuncture point stimulation by a number of methods including manual and electro acupuncture, acupressure and electrical stimulation in acute and delayed nausea postchemotherapy treatment. These modalities were used concomitantly with antiemetics. Acupuncture point stimulation was found to reduce the incidence of acute vomiting overall, with a relative risk of 0.82 (CI: 0.69-0.99) but did not affect acute or delayed nausea. Both needle and electrical acupuncture reduced the proportion of acute vomiting (RR: 0.74, 95% CI: 0.58-0.94 and RR: 0.76, 95% CI: 0.6-0.97) but not nausea severity. Interestingly, acupressure successfully reduced mean acute nausea severity (with a SMD -0.19, 95% CI: -0.37 to -0.01) with no reduction in vomiting noted. Acupressure is a technique which can be readily taught to patients and may be useful when used in conjunction with other modalities in this setting.

## **Postoperative nausea**

Postoperative nausea and vomiting are common. A 2006 Cochrane review demonstrated that only 28% of individuals benefit from the administration of antiemetic medications.<sup>2</sup> Three recent reviews into the use of acupuncture in adults and children, and ginger in postoperative patients, shows there may be a benefit for these therapies in this setting with minimal side effects.

A 2004 systematic Cochrane review by Lee et al<sup>3</sup> explored the potential benefits of using acupuncture at P6 (point at the wrist) postoperatively compared to traditional antiemetics. The review concluded that 'P6 acupoint stimulation can reduce the risk of nausea and vomiting after surgery with minimal side effects.

Compared with antiemetic prophylaxis, P6 acupoint stimulation seems to reduce the risk of nausea but not vomiting'. The review examined 26 randomised trials and demonstrated a significant reduction in nausea (RR: 0.72, 95% CI: 0.59–0.89) and vomiting (RR: 0.71, 95% CI: 0.56–0.91) when results were compared to sham acupuncture.

A 2006 meta analysis by Dune et al<sup>4</sup> pooled the results of 12 randomised controlled trials and demonstrated that acupressure and acupuncture are effective at reducing postoperative vomiting (RR: 0.69, 95% CI: 0.59–0.80) and nausea (RR: 0.59, 95% CI: 0.46–0.76) in children. The meta-analysis also showed there was no difference between acustimulation modalities and medication in reducing postoperative vomiting.

A 2006 meta-analysis performed by Chaiyakunapruk et al<sup>5</sup> looked at the potential use of ginger to control postoperative nausea and vomiting. Five placebo controlled randomised controlled trials were included in which 1 g of ginger was given to patients 1 hour before anaesthesia. The meta-analysis concluded that 1 g of ginger significantly decreased the incidence of postoperative nausea and vomiting in the 24 hours following surgery (RR: 0.65, 95% CI: 0.51–0.84). One patient of the total number of 363 included in the study experienced a minor side effect of abdominal discomfort.

#### **Pregnancy related nausea**

A 2003 Cochrane review analysed 28 trials of various remedies including antiemetic medications, vitamin B6, ginger and acupuncture in the management of nausea and vomiting in pregnancy. The review concluded by stating 'most of the drugs in this review have been shown to be more effective than placebo at reducing nausea and vomiting, vitamin B6 (pyridoxine) 10–25 mg three times per day is the least likely to cause side effects'. It was noted that vitamin B6 reduced the severity of nausea but not vomiting and that a higher dose of pyridoxine (75 mg) was found to be more effective at reducing vomiting than lower doses.<sup>6</sup> The data is limited, thus it is clear that more research is



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MBBS(Hons), FRACGP, FARGP, is a general practitioner, Clayton Victoria, and member, The RACGP-AIMA Joint Working Party. gillian. singleton@adm.monash.edu.au needed in this area. Pyridoxine is thought to be safe if taken in doses <100 mg/day. Higher doses may result in signs of toxicity ranging from neurological symptoms such as headache, paresthesias and hyperaesthesia to nausea and muscle weakness.<sup>7</sup>

# Conclusion

The evidence suggests there is a role for integrative therapies in the management of nausea and vomiting in a number of settings, particularly in the light of the broad safety profile of these therapies. Acupuncture has been shown to be useful with symptoms related to surgery and chemotherapy. Ginger and pyridoxine can be of benefit in nausea related to pregnancy and ginger used preoperatively can minimise postoperative nausea.

Conflict of interest: none declared.

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