



Mills and Bone Academy

Educational Article

Ginger: Relief for Nausea in Pregnant Women and Cancer Patients— Kerry Bone

When I first reviewed the use of ginger for nausea in the monograph in *Principles and Practice of Phytotherapy*, it was the best-proven treatment for nausea induced by a wide variety of causes. Now the evidence supporting its use is even stronger.

Most of the subsequent research published since 2000 has focused on ginger for nausea of pregnancy. A cluster of 3 positive studies were published in 2003 to 2004. The first study was conducted at the Royal Hospital for Women in Sydney.ⁱ The effect of a ginger extract on the symptoms of morning sickness was investigated in 120 women in a double blind, randomised, placebo-controlled trial. Participants were less than 20 weeks pregnant who had experienced morning sickness daily for at least a week and had experienced no relief through dietary changes. They received 125 mg of ginger extract (equivalent to 1.5 g of the dried root) or placebo four times a day

for 4 days. The nausea score was significantly less for the ginger group relative to placebo after the first day of treatment, and this difference was maintained for every treatment day. However, there was no significant impact on vomiting. Follow-up of the pregnancies revealed no problems. Four participants in the ginger group withdrew from the trial due to reflux and heartburn caused by the relatively high dose of ginger used.

In a second Australian study, the effect of 1.05 g of ginger or 75 mg of vitamin B6 per day were compared using a randomised, double blind design.ⁱⁱ The trial involved 291 women less than 16 weeks pregnant and each treatment was given for 3 weeks. The trial found that ginger was equivalent to vitamin B6 in reducing nausea, retching and vomiting. Morning sickness improved in little more than half of the women in each group. No

differences in congenital abnormalities were detected between the study groups and the overall risk of pregnancy complications did not differ.

The third study was conducted in Canada.ⁱⁱⁱ Rather than being a clinical trial, it was an observational study where pregnant women who took ginger were compared to a control group. The outcome of 187 pregnancies where women took ginger for nausea and vomiting were compared to 187 pregnancies where no medications were used. The study found that there were no statistical differences in pregnancy outcomes between the ginger group and the comparison group, with the exception of more infants weighing less than 2.5 kg occurring in the comparison group (12 versus 3, $p \leq 0.001$). In addition, 66 women who had used ginger alone for a minimum of 3 days completed an effectiveness evaluation for the treatment. The mean benefit score of 3.3 indicated a mild benefit for ginger in the treatment of nausea and vomiting of pregnancy. However, various types of ginger products were consumed by the women including capsules, ginger tea, fresh ginger, pickled ginger, candied ginger and so on. When the authors compared the effectiveness of the different forms of ginger, they found that the capsules were significantly more effective than all the other preparations combined (4.2 versus 1.7,

$p < 0.001$). However, a good quality tincture or extract should be as effective as capsules.

In 2009, a study was released from the Middle East that backs up this research. A group of 67 pregnant women with nausea and vomiting were given either 1000 mg/day of ginger as 4 capsules or a placebo.^{iv} The average length of the pregnancy was 13 weeks and the women taking ginger showed a significant improvement in nausea (86% versus 56% for placebo). The decrease in vomiting was also much greater in the ginger group (50% versus 9%).

While these studies in nausea of pregnancy are good news indeed, the really promising development has come from an investigation into ginger for nausea and vomiting caused by chemotherapy.^v Despite the widespread use of drugs for nausea, chemotherapy-related vomiting and nausea occurs in as many as 70% of patients. In a large clinical study funded by the prestigious National Cancer Institute in the US, 644 cancer patients (mostly with breast cancer) were included in a double-blind trial. The patients were either given a placebo or 3 different doses of ginger root as 250 mg capsules for 6 days, starting 3 days before their chemotherapy. On the day of their chemotherapy all patients were given a standard antiemetic drug by injection. All the tested doses of ginger significantly

reduced nausea compared to the placebo, and surprisingly the largest reduction occurred for the lower ginger doses (500 mg and 1000 mg).

The main active anti-nausea components in ginger are the gingerols, which are pungent (they taste hot). There have been some negative published studies on ginger in nausea, presumably because the ginger tested was not active enough. So it is a good idea to first test any ginger product you might want to recommend. If it does not taste really hot, it probably won't work for nausea.

References

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