



Introduction

Nausea with or without vomiting is one of the most common symptoms in early pregnancy which would be uncomfortable for the mother. Early Management is important for both the mother and her fetus. It may include dietary and lifestyle changes, medication and hospitalization for treatment of dehydration if severe vomiting by parenteral fluids. Natural products such as ginger have been suggested as herbal for treatment. The exact antiemetic mechanisms of ginger are still unknown, but in many studies they approve the antagonistic effects of ginger on serotonergic 5-HT₃ and cholinergic M receptors. Multiple studies were done to assess the effectiveness of Ginger comparing to either some medications such as vitamin B6 or other herbals.

Recommendations

- ✓ Treatment of nausea and vomiting in pregnancy with ginger has shown beneficial effects from multiple studies and can be considered as a non-pharmacological option.
- ✓ Either by making educational classes for the pregnant mother about the benefits of ginger or make posters where they can reserve the information by the posters during the routine pregnancy follow up.
- ✓ Since dietary modifications including eating small proportions of food at frequent intervals and ingesting dry toast or crackers are advised, we recommended concluded that ginger in biscuit form can be used by pregnant women.
- ✓ Since the effectiveness are already a proved, we hope that more studies done to assess its safety so we could formally use it.

Is GINGER effective and safe for reduction of nausea and vomiting during early pregnancy?

ARTICLE 1

META-ANALYSIS

Effects of Ginger for Nausea and Vomiting in Early Pregnancy

→ Aim of the study:

Examine and synthesize available data from good-quality randomized clinical trials to evaluate the efficacy of ginger in treating NVEP.

→ Problem:

Effectiveness of ginger for reducing nausea and vomiting in early pregnancy.

→ Population:

508 pregnant women in early pregnancy

→ Intervention:

Studies satisfying 3 criteria were selected:
(1) Randomized placebo-controlled design
(2) Use of ginger
(3) Extractable data on improvement in NVEP.

→ Comparison:

-256 patients were randomly assigned to receive **ginger**
-252 patients were randomly assigned to receive **placebo**

→ Outcome:

The outcome was show improvement of pregnancy-related nausea and vomiting. Which was reported in **all 6 studies**: 180 of the 256 subjects in the ginger group and 126 of the 252 subjects in the placebo group reported improvement in symptoms of nausea and vomiting.

→ Time:

January-February 2014



ARTICLE 2

A SYSTEMATIC REVIEW AND META-ANALYSIS Effect and safety of ginger in the treatment of pregnancy-associated nausea and vomiting

→ Aim of the study:

To assess the effectiveness of ginger in the treatment of NVP

→ Population:

- 1278 pregnant women. →Twelve studies

→ Intervention:

Administer oral ginger in different form for group 1 and administer placebo for control group.

→ Outcome:

Primary outcome "Symptomatic relief of nausea, number of vomiting episodes and general response to treatment"

All seven studies concluded that ginger was more effective than the placebo in relieving the intensity of nausea, or NVP in general.

Secondary outcome "Adverse events and side-effects": ginger significantly in- creased the risk of belching compared to vitamin B6 Dimenhydrinate significantly increased the risk of drowsiness compared to ginger. Ginger therefore does not seem to pose a risk for any major side-effects or adverse events occurring.

→ Time:

19 March 2014

ARTICLE 3

RANDOMIZED STUDY

Acupressure and Ginger to Relieve Nausea and Vomiting in Pregnancy

→ Aim of the study:

Compare the effect of ginger and acupressure in treating nausea and vomiting in early pregnancy

→ Population and Problem:

Total of 159 patients who follow up in antenatal clinic at Naghvi hospital, Kashan, Iran. Having mild to moderate nausea and/or vomiting before 16 week of gestation.

→ Intervention:

Each women in **acupressure group** were continuously wearing the wristband which used to pressure on the Neiguan point on both hands. Each woman in **ginger group** were taking ginger capsules (each capsule/250 mg, TID)

→ Comparison:

The comparison between 3 groups. **First group**, 53 patients who receive ginger. **Second group**, total of 53 patients receive acupressure. The **third group** which is control group, number of 53 patients did not receive any interventions.

→ Outcome:

No significant differences were found in the baseline characteristics between the three groups. On participant opinion, they found ginger useful for relieving nausea, vomiting, and retching in pregnancy.

→ Time:

From February 2012 to February 2015