

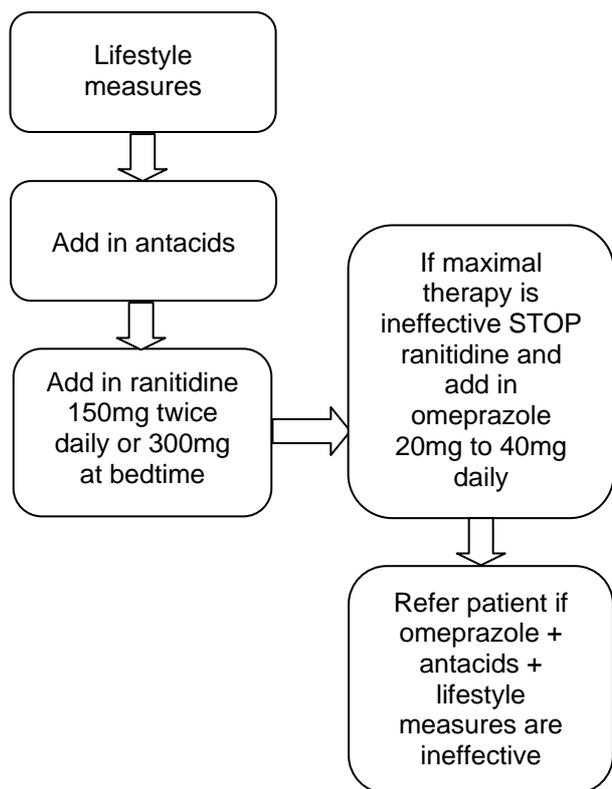
Treatment of gastro-oesophageal reflux disease (GORD) during pregnancy

Background

GORD is a common complaint during pregnancy. Approximately 80% of pregnant women experience heartburn at some point and some studies suggest that up to 50% of women will have symptoms during the first trimester. Starting early on and continuing throughout pregnancy there is a decrease in lower oesophageal sphincter pressure, decreased gastric peristalsis and delayed gastric emptying, which makes reflux more likely. These changes are thought to be related to an increase in circulating oestrogen and progesterone concentrations. Later the enlarging uterus also exacerbates oesophageal reflux.

Treatment

Ideally, all drugs should be avoided during pregnancy, especially during the first trimester. Move stepwise through the treatment flowchart below until the patient's GORD-related symptoms are controlled.



Lifestyle measures are aimed at minimising the incidence of reflux events and enhancing the clearance of acid from the oesophagus. Measures include:

- avoid of tight fitting garments around the waist – reduces stress on a weak sphincter
- avoid lying down soon after a meal – minimises reflux
- dietary modification – avoid foods that can lower oesophageal sphincter tone (fatty foods, chocolate and peppermint)

- avoid acidic drinks that can exacerbate symptoms (colas and orange juice)
- smoking and alcohol cessation – alcohol lowers oesophageal tone and smoking reduces salivation (which neutralises acid). NB. these should ideally have been already stopped due to pregnancy

Antacids are bases that neutralise hydrochloric acid in gastric secretions and are useful non-systemic therapy for mild reflux e.g. Titalac[®]. Theoretically, it is preferable to avoid aluminium containing antacids. Some antacids contain an alginate that forms a 'raft' on the top of the stomach contents e.g. Gaviscon[®]. Some of antacids e.g. Gaviscon[®] have relatively high sodium content, which should be avoided in pregnancy especially by patients with hypertension or renal impairment.

Ranitidine is a H₂-receptor antagonist, which blocks the action of histamine on parietal cells (stomach lining), thereby reducing hydrochloric acid secretion. It is not known to be a human or animal teratogen and wide experience suggests that use during human pregnancy is not problematic. Consider adding in ranitidine when GORD fails to respond to antacid therapy plus lifestyle measures alone. Due to a long history of use during pregnancy, ranitidine is considered first-line over omeprazole.

Omeprazole is a proton pump inhibitor, which irreversibly binds to the acid secreting pumps in the parietal cells, thereby reducing hydrochloric acid secretion. There are increasing data to support the safety of omeprazole use in pregnancy including more than 1000 exposures. This suggests that omeprazole use during pregnancy is not associated with an increased risk of foetal malformations, preterm delivery or growth retardation. Consider switching to omeprazole if the patient's symptoms do not respond to ranitidine.

Prokinetic agents such as metoclopramide are used rarely in the treatment of GORD. Metoclopramide is considered safe to use during pregnancy and is used to treat nausea and vomiting during pregnancy. There are no safety data to support the use of domperidone.

Summary

Ideally, as all drugs should be avoided when possible during pregnancy, the initial treatment of GORD should be with lifestyle measures. Add in non-systemic therapy with antacids when necessary. However, recommended therapies, such as ranitidine and omeprazole, are unlikely to be problematic and should be added in when antacids plus lifestyle measures are inadequate. Refer the patient to a specialist if maximal therapy with omeprazole plus antacids and lifestyle measures fails to control symptoms.