Message from OPH GP Liaison

Welcome to the 7th edition of the OPH GP Shared Antenatal Care Newsletter. In this edition, I have concentrated on the symptoms and management of some of the less severe, but none the less irritating symptoms that pregnancy can produce. These symptoms often manifest early in the pregnancy and are therefore usually tackled in General Practice.

As always I would be most happy to investigate and publish other topics. Let me know if you have any suggestions:
clare.matthews@health.wa.gov.au

Dr Clare Matthews, OPH GP Liaison

Varicose Veins and Leg Oedema

Varicosities may develop in up to 40% of pregnant women. The increase in blood volume during pregnancy and effect of progesterone relaxing the muscular walls of the veins causes increased pressure on the veins. Varicose veins often improve three to four months following birth, and oedema generally reduces soon after birth.

Evidence regarding successful interventions for varicose veins and leg oedema in pregnancy is lacking, however despite lack of adequate research, support measures such as use of compression stockings and elevation of the legs may provide comfort to women. Based on two small studies, reflexology or water immersion appears to improve symptoms for women with leg oedema.

MANAGEMENT

1. Elevate the legs when at rest.
2. Water immersion or compresses or spraying legs with hot and cold water may alleviate symptoms.
3. Reflexology may provide relief.
4. Avoid prolonged standing or immobility- take breaks to exercise or elevate the legs, and avoid wearing high heeled shoes.
5. Avoid tight or restrictive clothing.
6. Regular exercise improves calf muscle pump. Encourage ankle flexion exercise for at least 30 minutes per day.
7. Compression stockings may relieve swelling and aching of legs and prevent development of more varicose veins. Remove at night.
8. If resting for long periods, women are advised to lie on their left side which decreases pressure on the veins in the legs and feet (the inferior vena cava is on the right side, and left-sided position relieves it of the weight of the uterus).

9. Encourage use of compression stockings for plane travel or long vehicle journeys.

Note: Varicose veins are a risk factor for venous thromboembolism, and in combination with other VTE risk factors (e.g. long distance travel) may require VTEprophylaxis.


Nausea and Vomiting in Pregnancy

Nausea with or without vomiting is common in early pregnancy (50%). The symptoms usually peak at around nine weeks. Hyperemesis Gravidarum (severe vomiting resulting in dehydration) occurs infrequently. It is important to rule out other medical problems such as gastritis, UTI, dehydration, other infection. Management is dependent on severity of symptoms.

MILD

1. Dietary / lifestyle changes

Eat before or as soon as they feel hungry. Eat a snack before getting out of bed in the morning. Eat a high protein snack prior to going to bed.

Meals and snacks should be eaten slowly and in small amounts, every 1-2 hours to avoid a full stomach that can aggravate nausea.

Avoid rich, strongly odorous, fatty, spicy or caffeinated food and drink as these can be a trigger. Low fat, bland, protein dominant meals/snacks may help.

Drinking peppermint tea or sucking peppermint lollies can reduce post-prandial nausea.

Fluids should be consumed 30 minutes before or after a meal to avoid the trigger of a full stomach. Increase fluids to at least two litres per day.

Tiredness may exacerbate symptoms - so getting sufficient rest may assist.

Iron supplements can aggravate nausea and may need to be ceased temporarily.

2. Ginger in the form of capsules, tea or food made with ginger syrup or root, can improve nausea but not vomiting. (up to 250mg Q 6 hourly).

3. Pyridoxine (vitamin B6) can improve nausea, has a good safety profile with minimal side effects, and is easy to obtain. (25-50mg every 6-8 hours—max dose 200mg/day).

4. Acupuncture/ acupressure/ hypnosis may assist some women.

MODERATE

5. Medication

Initially use pyridoxine plus

   a. Doxylamine 12.5mg am and lunch, 25mg nocte.
   b. Promethazine (preg cat C).
   c. Prochlorperazine (preg cat C) 5-10mg Q4-6 hours.
   d. Metoclopramide (preg cat A) 10mg tds.
   e. Ondansetron (cat B1) 4-8mg 2-3 times per day.

SEVERE

If dehydrated, rehydrate with oral or intravenous rehydration.

If no satisfactory response IM/IV treatment with metoclopramide, ondansetron, prochlorperazine, promethazine may be considered.


**Gastro-Oesophageal Reflux / Heartburn**

Heartburn is common in pregnancy (incidence is 17-80%), and can occur in all trimesters, with increasing severity in later pregnancy. There is increased likelihood of heartburn if the woman is multiparous, if there was heartburn prior to pregnancy and with increased gestational age. Elevated levels of progesterone cause the lower oesophageal sphincter to become more relaxed allowing gastric reflux. Impaired gut motility and gastric emptying, and increased abdominal pressure from the gravid uterus may contribute to heartburn in pregnancy.

**MANAGEMENT**

**Clinical History**

Symptoms of heartburn can be similar to epigastric pain associated with preeclampsia. Exclude diagnosis of pre-eclamptic toxaemia (PET) – check blood pressure and perform urinalysis, fetal growth, check for PET symptoms (>20 weeks gestation) and screening bloods if indicated.

**Dietary and other modifications:**

- Eat small frequent meals.
- Avoid eating and drinking at the same time to reduce stomach volume.
- Avoid gastric irritants (foods and medications causing reflux) e.g. chocolate, coffee, citrus juices, tomato products, alcohol, fizzy drinks, greasy/spicy/acidic foods.
- Avoid eating late at night or within three hours of going to bed.
- Chewing gum stimulates the salivary glands and may neutralise acid.
- Cease smoking.

**Positioning**

- Elevate the head of the bed by 10-15cm.
- Lying on the left side may reduce frequency of reflux.
- Encourage an upright position where possible, avoiding lying down after meals.

**Pharmacological interventions**

- Antacids: Most calcium and magnesium-based antacids are considered safe at usual doses. Avoid taking the antacid near the time of consuming supplemental iron (gastric acid facilitates the absorption of iron). Take antacids at least one hour apart from iron and other medications.
- Ranitidine 150mg twice daily can effectively treat oesophageal reflux.
- Intermittent use of metoclopramide (*pregnancy category A*) is safe in pregnancy.
- For severe symptoms, Omeprazole (*preg. cat. B3*) can be prescribed after medical review.


**Constipation in pregnancy and the postnatal period**

Up to 40% of women experience constipation during pregnancy, which is usually worse in the second trimester.

44% of women may experience symptoms of incontinence following a vaginal delivery, and 17% to 20% of women may experience symptoms of constipation postpartum.

The cause of constipation is usually multifactorial. In pregnancy it can be caused by the elevated progesterone levels causing smooth muscle relaxation, reduced motility and increased water absorption.

Straining to defecate can lead to damage of the pudendal nerve, impairing the supportive functioning of the pelvic floor muscles. This can be a contributing factor in development of utero-vaginal prolapse.
Management options
1. Increase dietary fibre to recommended 30g/day.
2. Increase fluid intake.
3. Fibre laxative such as psyllium.
4. Osmotic agents such as lactulose 15-30ml 1-2/day, Macrogol 3350 with electrolytes (Movicol) category B11-2 sachets in water- can increase up to eight sachets for faecal impaction.
5. Stool softeners: Docusate (Coloxyl) (preg Cat A).
6. Stimulant laxatives: Bisacodyl (preg Cat A) 1-2x5mg daily, senna (preg Cat A).
7. Rectal stool softener Glycerol suppository.

<table>
<thead>
<tr>
<th>Classification of Laxative Therapies</th>
<th>CLASS</th>
<th>DRUG</th>
<th>BRANDS</th>
<th>SITE OF ACTION</th>
<th>MECHANISM OF ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Osmotic laxatives</td>
<td></td>
<td>Sorbitol</td>
<td>Sorbilax</td>
<td>Colon</td>
<td>Retains fluid in the colon by osmotic effects and stimulates peristalsis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lactulose</td>
<td>Actilax/ Duphalac</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Glycerine</td>
<td>Glycerol suppository</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Polyethylene</td>
<td>Movicol</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Glycol</td>
<td>ColonLYTELY</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Saline</td>
<td>Fleet – oral liquid and enema</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laxatives</td>
<td>Microlax Picoprep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: Use with caution when inadequate fluid intake, especially in the elderly. Contraindicated in women with intestinal obstruction, megacolon or pre-existing faecal impaction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Lubricant/ softeners</td>
<td></td>
<td>Docusate</td>
<td>Coloxyl (also Coloxyl and Senna)</td>
<td>Small and large intestine</td>
<td>Use with a stimulant or osmotic laxative. Docusate and poloxamer are detergents and act to soften stools.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Liquid paraffin</td>
<td>Agarol</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poloxamer</td>
<td>Coloxyl oral drops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Note: Not recommended for long term use. Contraindicated for use in patients with:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Intestinal obstruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Inflammatory bowel conditions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Departmental update
Women’s and Newborn Services at Osborne Park Hospital were sorry to see Dr Palavi Desai, Consultant in Obstetrics and Gynaecology resign and move on to new horizons in Sydney, she will be missed. We are pleased to announce that her replacement is Dr Jega Rao who is currently at Fiona Stanley Hospital. Dr Rao is due to commence at Osborne Park Hospital in April 2018. Dr Su Hamid has also joined our team in a part time capacity.

This document can be made available in alternative formats on request for a person with a disability.