

Minor Symptoms or Disorders in Pregnancy

.Gastro-esophageal reflux

- **Varicose veins and leg edema**
- **Hemorrhoids**
- **Nausea and vomiting**
- **Vaginal discharge**
- **Pelvic Girdle and Low back pain**
- **Carpel tunnel syndrome**
- **Leg cramps**

1-GASTRO-OESOPHAGEAL REFLUX / HEARTBURN

This is very common. Altered structure and function of the normal physiological barriers to reflux, namely the weight effect of the pregnant uterus and hormonally induced relaxation of the esophageal sphincter, explain the extremely high incidence in the pregnant population. For the majority of patients, lifestyle modifications such as smoking cessation, frequent light meals and lying with the head propped up at night are helpful. When these prove insufficient to control symptoms, medications can be added in a stepwise fashion starting with simple antacids. Histamine-2 receptor antagonists and proton pump inhibitors can be used if more simple measures fail

2-VARICOSE VEINS AND LEG OEDEMA

causes increased pressure on the veins. Varicose veins often improve three to four months following birth, 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 and oedema generally reduces soon after birth.

***MANAGEMENT**

Non-Pharmacological interventions

- Elevate the legs when at rest
- Water immersion or compresses may alleviate symptoms
- Avoid prolonged standing or immobility and wearing of high heels
- Avoid tight or restrictive clothing
- Regular exercise improves calf muscle pump. Encourage ankle flexion exercise for at least 30 minutes per day.
- Compression stocking may relieve swelling and aching of legs and prevent more varicose veins from developing.
- If resting for long periods women are advised to lie on their left side (inferior vena cava is on the right side, and left-sided position relieves it of the weight of the uterus).

3-HAEMORRHOIDS

The greater blood volume in pregnancy causes an increase in women to symptomatic hemorrhoids. Additionally venous stasis may be increased due to the enlarging gravid uterus and the increase in pelvic laxity.

***conservative management**

- Prevention of constipation - high fiber diet, increased fluid intake, exercise.
- Stool softeners.
- Mild analgesia.
- Avoid straining during defecation, and encourage defecating in the morning and after meals when colonic activity is highest.
- Skin protection creams may be beneficial for pruritus and discomfort.
- Topical local anesthetic, Proctosedyl ointments. However, creams containing topical anesthetic may induce sensitization, and topical corticosteroids may exacerbate local infection and cause skin irritation so use should be limited for < 7 days.

- Warmed baths may be used to decrease sphincter tone or improve venous congestion

Surgical Management

Closed excision haemorrhoidectomy for symptomatic hemorrhoids using local anesthetic can be safely performed during pregnancy

4-Hyperemesis gravidarum

Nausea and vomiting in pregnancy are extremely common; 70–80 per cent of women experience these symptoms early in their pregnancy and approximately 35 per cent of all pregnant patients are absent from

work on at least one occasion through nausea and vomiting. Although the symptoms are often most pronounced in the first trimester, they by no means are confined to it. Similarly, despite common usage

of the term ‘morning sickness’, in only a minority of cases are the symptoms solely confined to the morning. Nausea and vomiting in pregnancy tends to be mild and self-limited and is not associated with adverse pregnancy outcome.

Hyper emesis gravid arum, however, is a severe, intractable form of nausea and vomiting that affects 0.3–2.0 per cent of pregnancies. It causes imbalances of fluid and electrolytes, disturbs nutritional intake *and metabolism, causes physical and psychological debilitation and is associated with adverse pregnancy outcome, including an increased risk of preterm birth and low birth weight babies. The a etiology is unknown various putative mechanisms have been proposed including an association with high levels of serum human chorionic gonadotrophin (hCG), estrogen and thyroxin. The likely cause is multifactorial*, Severe cases of hyper emesis gravid arum cause malnutrition and vitamin deficiencies, including Wernicke’s encephalopathy, and intractable retching predisposes to esophageal trauma and Mallory– Weiss tears

- **Treatment** : includes:
 - *fluid replacement and thiamine supplementation*
 - *,Antiemetic* :such as phenothiazines are safe and are commonly prescribed
 - administration of corticosteroids have not yet been

5-VAGINAL DISCHARGE

High levels of estrogen in pregnancy result in marked shedding of superficial mucosal cells in the vagina leading to increased vaginal discharge (leucorrhoea). The normal bacteria in the vagina interacts with increased glycogen in the mucosal cells causing increased acidity in the vagina which provides some protection against pathogens, but increases risk for *Candida albicans* and *Trichomonas vaginalis*

MANAGEMENT

- Women should be advised of normal physiological vaginal discharge changes in pregnancy, and instructed to inform health professionals of any abnormalities.
- Obtain vaginal or/and cervical swabs for laboratory testing as required.

6- GIRDLE AND LOW BACK PAIN

45-50% of women experience pregnancy-related low back (PLBP) or pelvic girdle pain (PGP), with more than 80% of these women experiencing difficulties with daily living, and up to 30% requiring bed rest and leading to absence from work. PGP refers to pain in the symphysis pubis and/or pain in the region of one or both of the sacroiliac joints, and pain in the gluteal region. Pain is often aggravated during standing, walking, sitting, twisting, climbing of stairs, and turning while in bed. The pain with PGP is intermittent, there is no restriction of lumbar spine or hip movement, and it is often described as a stabbing, burning, dull, or shooting pain.

PLBP however, is characterized by lumber region pain, is dull, and women experience it during forward flexion.

MANAGEMENT

Reassure women that most PGP resolves in a few weeks or within the month following delivery, however in 8-10% of women pain can be experienced for 1-2 years.

- Conduct a medical history and physical examination to exclude other causes of pain e.g. trauma, fevers, neurological symptoms, inflammatory signs or tenderness.
- Education and management for women with PGP or PLBP includes: avoidance of fatigue and have frequent periods of rest
 - avoiding situations that aggravate the condition e.g. unrelenting postures, twisting while lifting, activities such as unequal weight bearing, bouncing, hip abduction
 - using pillows to support the abdomen while lying in the lateral position, and to support the lower back when sitting, and placement of a lumbar roll behind the back with the feet slightly elevated.
 - use of massage and local applications of heat and cold may provide relief

7-CARPEL TUNNEL SYNDROME

Carpel tunnel syndrome (CTS) in pregnancy usually presents in the second or third trimester and is caused by excess fluid compressing of the median nerve in the wrist. This causes paraesthesias, swelling and pain in the hand/hands, and impairs sensory and motor function of the hand. Symptoms often are worst at night, and can be exacerbated by forceful activity and extreme wrist positions. In pregnancy hormonal changes, edema, and generalized slowing down of nerve conduction (if a woman has gestational diabetes) have been linked to causing CTS. Women who have pre-eclampsia, hypertension, excessive weight gain, and have oedema in pregnancy are at more risk for developing CTS

MANAGEMENT

- Early treatment involves activity modification including: □□ avoiding positions of extreme flexion or extension
- avoiding prolonged exposure to vibration e.g. driving, , use of power tools
- avoiding repetitive actions or aggravating activities e.g. typing
- Arrange physiotherapy referral if symptoms require further management. wrist splinting may be initiated – a neutral position maximizes carpel tunnel volume and decreases pressure on the median nerve. Splints are normally

worn at night, however some women may find they need to wear them during the day as well.

- Corticosteroid injections provide temporary relief in 80% of patients. However, if given to a patient with diabetes it can cause transient serum glucose elevation for up to 5 days.

Inform women the symptoms of carpal tunnel syndrome normally resolve within 2 weeks of birth.

- Surgical options are generally not recommended during pregnancy

8-LEG CRAMPS

Leg cramps and restless leg syndrome usually occur at night and may affect up to 30% of pregnant women. The cause of leg cramps in pregnancy is unclear, although suggested reasons include the slowed venous return due to raised intra abdominal pressure, the progesterone effect causing decreased tone in the venous musculature, and nutritional deficiencies due to fetal demands. The pain experienced during leg cramps is caused by a buildup of lactic and pyruvic acid leading to involuntary muscle contraction. Calcium supplementation has not been shown to be effective, however magnesium supplements may provide a slight effect at decreasing the number of attacks.

MANAGEMENT

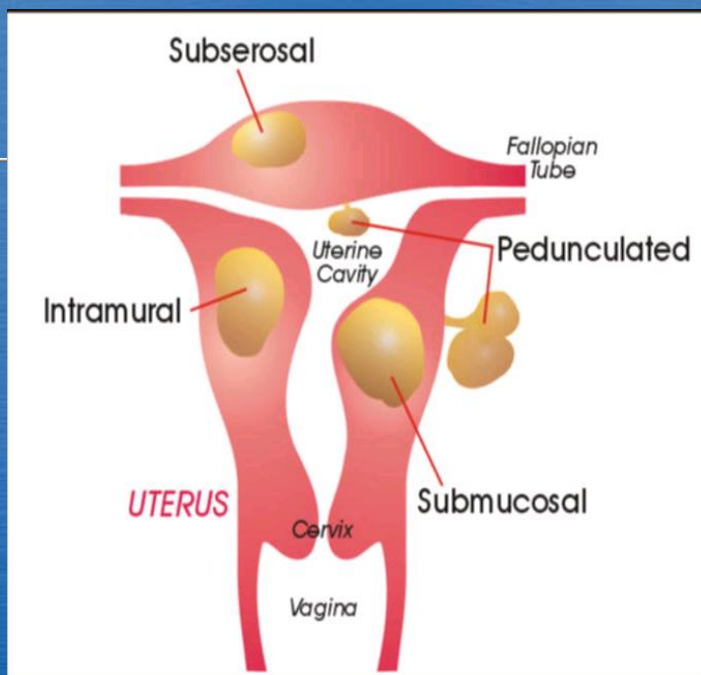
- Perform a health history to exclude other causes of leg cramps such as: electrolyte imbalances, dehydration, inactivity or excessive exercise
- musculoskeletal problems e.g. prolonged sitting, back injuries, strenuous exercise of lower limbs, flat feet
- endocrine conditions e.g. thyroid disease, diabetes
- renal damage leading to muscle cramping and weakness
- cardiovascular conditions e.g. history of deep vein thrombosis.
- neurological conditions e.g. multiple sclerosis, Huntington disease

• **Strategies for prevention or relief of cramps include:**

- during leg cramps – massage, walking, and stretching may help
- a warm bath prior to bedtime
- drinking adequate fluids
- prophylactic night-time calf stretching

Problems due to abnormalities of the pelvic organs

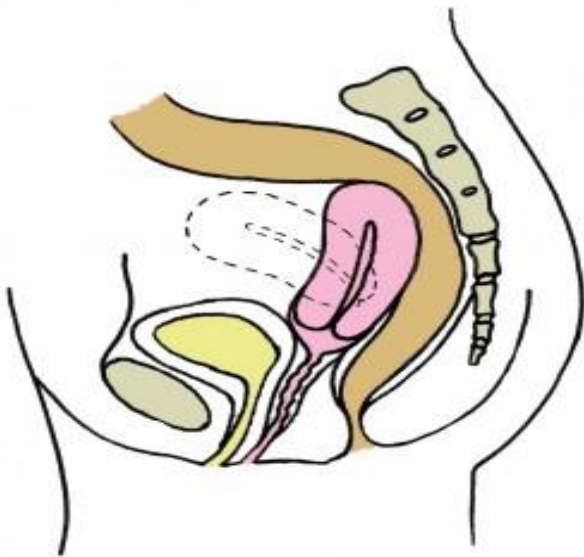
1-Fibroids: Fibroids are compact masses of smooth muscle that lie in the cavity of the uterus (submucous), within the uterine muscle (intramural) or on the outside surface of the uterus (subserous). They may enlarge in pregnancy, and in so doing present problems later on in pregnancy or at delivery.



Complication of fibroid in pregnancy:

- a- obstruct vaginal delivery: A large fibroid at the cervix or in the lower uterine segment may prevent descent of the presenting part
- b- Red fibroid degeneration: Red degeneration is one of the most common complications of fibroids in pregnancy, it grows, the fibroid may become ischemic; this manifests clinically as acute pain, tenderness over the fibroid and frequent vomiting. If these symptoms are severe, uterine contractions may be precipitated, causing miscarriage or preterm labor
- c- acute abdominal pain: A sub serous pedunculated fibroid may twist, the same way that a large ovarian cyst can.

2- Retroversion of the uterus Fifteen per cent of women have a retroverted uterus. In pregnancy, the uterus grows and a retroverted uterus will normally 'flip' out of the pelvis and begin to fill the abdominal cavity, as an anteverted uterus would. Retention of urine may occur, classically at 12–14 weeks, and this is not only very painful but may also cause long-term bladder damage if the bladder becomes over-distended. In this situation, catheterization is essential until the position of the uterus has changed.



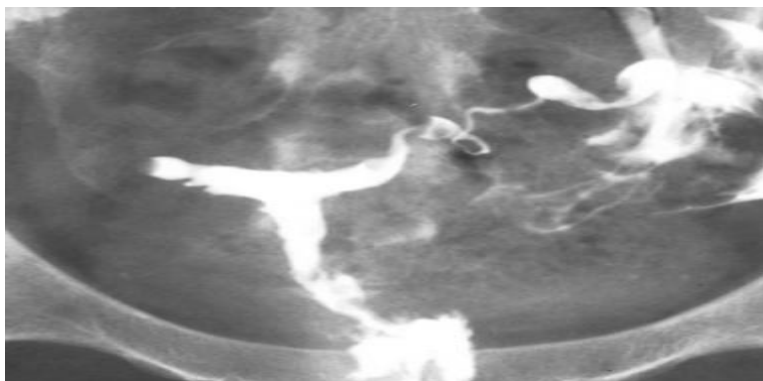
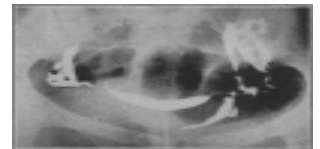
3- Congenital uterine anomalies: The shape of the uterus is embryologically determined by the fusion of the Mullerian ducts. Abnormalities of fusion may give rise to anything from a subseptate uterus through to bicornuate uterus and even (very rarely) to a double uterus with two cervixes. These findings are often discovered incidentally at the time of a pelvic operation such as a laparoscopy, or an ultrasound scan. The problems associated with bicornuate uterus are:

- miscarriage;
- preterm labour;
- preterm prelabour rupture of membranes (PPROM);
- abnormalities of lie and presentation;
- higher Caesarean section rate.

Didelphic uterus



bicornuate uterus



T shaped uterine cavity

4-Ovarian cysts in pregnancy: Ovarian cysts are common in pregnant women. The most common types of pathological ovarian cyst are serous cysts and benign teratomas. Physiological cysts often corpus luteum may grow to several centimeters but rarely require treatment.,

A-asymptomatic: cysts may be followed up by clinical and ultrasound examination

B-Symptomatic cysts. The major problems are of large (>8 cm) ovarian cysts in pregnancy, which may undergo torsion, haemorrhage or rupture, causing acute abdominal pain. A full assessment must include a family history of ovarian or breast malignancy, tumor markers (although these are of limited value in pregnancy) and detailed ultrasound investigation of both ovaries. Surgery in the late second and third trimester of pregnancy is normally performed

5-Cervical cancer Cervical abnormalities are much more difficult to deal with in pregnancy, partly because the cervix itself is more difficult to visualize at colposcopy, and also because biopsy may cause considerable bleeding. The disease is commonly asymptomatic in early stages, but later stage presentation includes vaginal bleeding (especially postcoital). Examination may reveal a friable or ulcerated lesion with bleeding and purulent discharge. The prospect of cervical carcinoma in pregnancy leads to complex ethical and moral dilemmas concerning whether the pregnancy must be terminated (depending on the stage it has reached) to facilitate either surgical treatment (radical hysterectomy) or chemotherapy,

6-Urinary tract infection Urinary tract infections (UTIs) are common in pregnancy. Eight per cent of women have asymptomatic bacteriuria; if this is untreated, it may progress to UTI or even pyelonephritis, with the attendant associations of low birth weight and preterm delivery: Urinary tract infections (UTIs) are common in pregnancy.

The predisposing factors are:

- history of recurrent cystitis;

- renal tract abnormalities: duplex system, scarred kidneys, ureteric damage and stones;
- bladder emptying problems, for example multiple sclerosis.
- diabetes

The most common organism for UTI is *Escherichia coli*; less commonly implicated are streptococci, *Proteus Pseudomonas* and *Klebsiella*.

The symptoms of UTI may be different in pregnancy; it occasionally presents as low back pain and general malaise with flu-like symptoms frequency, dysuria and haematuria, **On examination**, tachycardia, pyrexia, dehydration and loin tenderness may be present. **Investigations** should include a full blood count and midstream specimen of urine (MSU) sent for gram microscopy, culture and sensitivities. **treatment** fluids intake and take a simple analgesia and antibiotics should start immediately