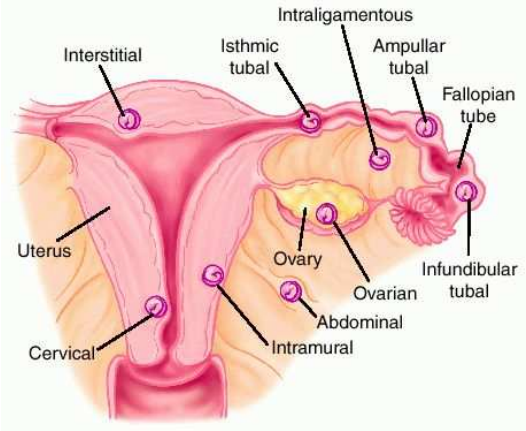
Ectopic Pregnancy

Extra-uterine pregnancy.
2-3% of pregnancies
Leading cause of maternal death in 1st trimester (10% of all maternal deaths)

Anatomy

- Majority in the ampulla or isthmus of fallopian tube.
- R>L tubal pregnancy (?inflammatory damage from previous appendicitis).
- 6%fimbrial, <2% interstitial (cornual) ectopics.
- Rarely cervical, ovarian, & abdominal sites, as well as previous Caesarean secdtion scars.
- Heterotopic pregnancy = co-existing with intrauterine pregnancy (1:4,000 pregnancies.). RF: IUCD,PID, assisted conception, tubal surgery
- Rarely ectopic pregnancy can be successfully carried to term – usually abdominal.



Cornual pregnancy

Cornual pregnancy does not represent pregnancy in a rudimentary horn of a bicornuate uterus, but pregnancy in the interstitial rather than extrauterine part of the tube.
It tends to present early and suddenly and often there is catastrophic haemorrhage.

Risk factors

- Tubal surgery / infection
- PID
- ↑Age
- Previous ectopic pregnancy
- Endometriosis
- Infertility, IVF
- Smoking
- Multiple sexual partners
- Where an IUCD or progestogen-only OCP, including emergency contraception fails
- DES exposure
- Abnormal anatomy – e.g. septate uterus, tumours

Presentation

History

- 30% of ectopics present before a period has been missed. Most present @ 6-9wk
- Usual presentation: central or iliac fossa pain often preceding any vaginal bleeding.
- Lateral tubal implantation will present later (pain or rupture) as more room to expand.

Examination

- If ruptured, profuse bleeding (usually into pelvis rather than PV) may → ↑HR, postural ↓BP, frank shock.
- Abdominal tenderness or mass. Peritonism if ruptured. Shoulder tip pain.
- Bimanual VE may reveal cervical excitation or unilateral tender fullness of one adnexum, however some authorities advise avoiding unnecessary VE in ectopics.

Investigations

Urine: βhCG

Blood: FBC, G&H/XM, serial βhCG (in viable pregnancy level doubles every 48h, in ectopics increase is linear & <50% increase in 48h), progesterone level (low in ectopic or non-viable preg)

Imaging: viable intrauterine gest sac should be visible @ 6/40 on abdominal USS or if using transvaginal USS @ 5/40 or βhCG>1500IU/mL.

Differential diagnosis

- Miscarriage of uterine pregnancy
- Implantation bleed
- Non-gestational DDx of iliac fossa pain.

Management

Resuscitation:

- O_2, 2 x IVC, fluid/blood. Urgent O&G r/v & USS

Medical:

- If early & unruptured (βhCG <3500 U/ml, tube size<3cm) & no cardiac activity on USS, can give **methotrexate** IM 50-90mg. Repeat dose if βhCG not ↓ by day 4.
- **SE:** stomatitis, photosensitivity, impaired liver function, gastritis, marrow suppression, fever, reversible alopecia.
- **AntiD Ig** if Rh –ve.

Surgical

- If haemodynamically unstable, live foetus, >100ml blood in pouch of Douglas.
- Cervical ectopics usually need hysterectomy.
- Tubal ectopics if large, uncontrollably bleeding or severely damaged need salpingectomy, otherwise conservative surgery (salpingotomy, salpingostomy).
- Usually laparoscopic unless haemodynamically unstable.

Complications

- Persistent trophoblast post surgery (4-8%) → delayed haemorrhage. Rx: **methotrexate**.

Prognosis

- The risk of another ectopic pregnancy is about 10-20%.
- The chance of subsequent intrauterine pregnancy is about 55-60%.