Ectopic Pregnancy

Ectopic Pregnancy
• Implantation outside the uterine cavity
• 1 in 60 pregnancies
• Potentially life threatening due to acute haemorrhage into peritoneal cavity
• Very rarely embryo may implant into ovary, peritoneum or cervix
• 98% are within the fallopian tube

Risk factors
• 50% idiopathic- no risk factors
• Anything which reduces tubal motility or ciliary function
• Assisted conception techniques
• Pelvic inflammatory disease, especially chlamydia
• Ruptured appendix with adhesions
• Tubal surgery eg reversal of sterilisation
• IUCD- prevents intrauterine pregnancy
• Progesterone only pill (POP) reduces tubal motility

Presentation
• Collapse (10%)
• Acute abdominal pain
• Period of amenorrhea (eg 6-8 weeks)
• Shoulder tip pain (10%) due to diaphragmatic irritation by blood
• Light vaginal bleeding (spotting), typically preceded by the pain
• History of trying to conceive or irregular contraception
• Gastointestinal symptoms eg diarrhoea

On examination
• If subacute presentation, may be some abdominal tenderness, but little else
• If acute, signs of shock (tachycardia, hypotension, pale, sweaty) plus triad:
  • Guarding
  • Cervical excitation (movement pain)
  • Tender adnexal mass

Most patients
• Do not have the classic triad
• And at least 25% have no vaginal bleeding
• Hence a high index of suspicion is needed for any woman of reproductive age with low abdominal pain
• Diagnosis depends on ultrasound combined with measurement of serum βHCG
**Differential diagnosis**
- Miscarriage
- Acute appendicitis
- Acute salpingitis
- Ovarian cyst with rupture or torsion

**Serum βHCG**
- Normally becomes positive very early- before a period is missed
- If negative, an ectopic is very unlikely
- If positive, level should double every 48 hours if pregnancy is intrauterine

**Ultrasound**
- Ultrasound does not often pick up the ectopic itself- hard to identify within tube
- Uterus responds to ectopic pregnancy by endometrial proliferation- so a pseudosac or gestation ring may be seen
- A true sac should be seen from 5 weeks
- Absence of true gestation sac makes ectopic pregnancy likely

**βHCG discriminatory zone**
- βHCG and ultrasound results are combined
- On transvaginal ultrasound, a βHCG level of 1000 iu/l should reveal an intrauterine sac
- On abdominal ultrasound, the discriminatory zone is 6000 iu/l
Acute- management
• IV access and fluids
• FBC and cross match
• Monitor and correct haemodynamic shock
• Stop bleeding- laparotomy or laparoscopy

Laparoscopy
• Depends on availability of trained staff and equipment
• Smaller incisions, quicker recovery
• Fewer adhesions- ? less risk future ectopic
• Salpingectomy usually performed if contralateral tube is healthy
• Occasionally salpingotomy if contralateral tube is abnormal (heals by secondary intent)

After the procedure
• Risk of recurrence is 1 in 5
• As soon as pregnant again, advised to attend for early scan
• Chance of further pregnancy is good so long as contralateral tube is healthy