Ectopic Pregnancy

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- Implantation of the conceptus outside the uterine cavity.
- 93-95% tubal: the remainder are in caesarean scars, interstitial, abdominal, ovarian, or cervical

Risk factors

- History of infertility or assisted conception.
- History of PID.
- Endometriosis.
- Pelvic or tubal surgery.
- Previous ectopic (recurrence risk 10-20%).
- IUCD, IUS, or progesterone-based contraception.
- Assisted conception, especially IVF.
- Smoking.

Diagnosis

Symptoms

- often asymptomatic, e.g. unsure dates
- amenorrhea (usually 6-8wks)
- pain (lower abdominal, often mild/vague, classically unilateral)
- vaginal bleeding (usually small amount, often brown)
- diarrhea and vomiting should never be ignored
- dizziness and light-headedness
- shoulder tip pain (diaphragmatic irritation-hemoperitoneum)
- collapse (if ruptured).
- Triad of amenorrhea, abdominal pain and bleeding per vagina > consider ectopic pregnancy.

Signs

- often have no specific signs
- uterus usually normal size
- cervical excitation and adnexal tenderness occasionally
- adnexal mass very rarely
- peritonism (due to intra-abdominal blood if ectopic ruptured).

Investigations

- Urine pregnancy test
- TVS/USS: establish the location, presence of adnexal masses or free fluid, absence of an intrauterine gestation.
- Serum hCG: repeated 48h later:

- the rate of rise is important
- a rise of ≥66% suggests an IUP
- a suboptimal rise is suspicious, but not diagnostic of an EP.

➢ ALL women of reproductive age are pregnant until proved otherwise and it's ectopic until demonstrated to be intrauterine.

Management of ruptured (acute) ectopic pregnancy

- Resuscitation if a patient is presenting with shock
  - IV access with a wide-bore needle
  - Collect blood for grouping, matching and FBC
  - Arrange to transfuse blood urgently to combat shock (hypovolemia)
  - Give IV fluid (N/S or R/L) while waiting for blood o O2 inhalation
- Explain regarding possible diagnosis, need for blood transfusion and urgent laparotomy to the patient and her relatives
- Inform senior anesthetist
- At laparotomy
  - Assess the amount of hemoperitoneum
  - Inspect the contralateral tube and ovary
  - Salpingectomy is indicated in
    - Ruptured tubal pregnancy
    - Recurrent ectopic pregnancy in a tube already treated conservatively
    - Previous sterilization and reversal of sterilization
    - Previous tubal surgery for infertility
    - Pre-existing tubal damage
  - Secure haemostasias
  - ± Peritoneal toilet ± drain
  - Send specimen for histological examination
- Explain operative findings and post-op diagnosis to patient and relatives
- Anti-D prophylaxis at a dose of 250 IU should be given to all non-sensitized Rh negative patients who have a surgical management.
- Advise to seek early medical check and USG for localization of pregnancy in subsequent pregnancy since there is a risk of recurrence
- For women who have had a salpingotomy, take serum hCG measurement at 7 days after surgery, then serum hCG measurement per week until a negative result is obtained.

Management of hemodynamically stable patient

Expectant and medical management are safe options even with a diagnosed EP if there are strict selection criteria:

- Clinically stable.

- Asymptomatic or minimal symptoms.
- No fetal cardiac activity on TV USS.
- No hemoperitoneum on TV USS.
- Fully understand symptoms and implications of EP.
- Live near the hospital and have support at home.

Expectant

- Initial hCG <1500IU which is falling.
- EP <30mm.
- Requires serum hCG initially every 48h until repeated fall in level: then weekly until <15IU.
- With slow rising hCG in asymptomatic patient, a decision for expectant management should only be made by a senior obstetrician.

Medical

- EP <35mm and initial hCG <5000IU.
- Methotrexate is given IM as a single dose of 50mg/m^2. hCG levels are measured at 4 and 7 days, and another dose given (up to 25% of cases if the decrease in hCG is <15% between days 4-7.
- Measure hCG weekly until non pregnant level.

➢ Women should be given clear, written information about adverse effects and the possible need for further treatment. They should use reliable contraception for 3mths after, as methotrexate is teratogenic.

Health education

- Explain about risks of recurrence
- Importance of early antenatal care and early ultrasound scan in future pregnancy
- Counseling for family planning

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