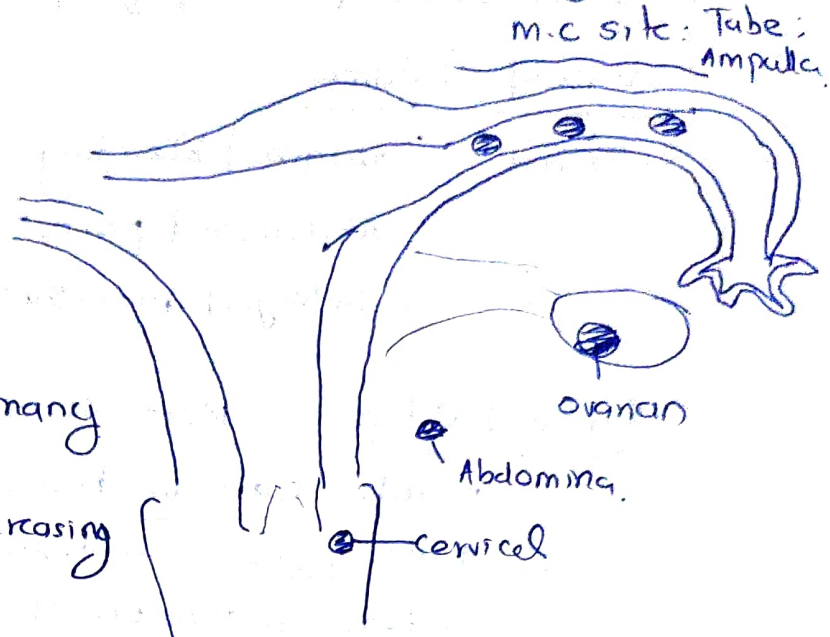
Ectopic pregnancy

An ectopic pregnancy is one which fertilized ovum is implanted and develops outside the normal endometrial cavity.



M.C site: Fallopian tube.
m.c site at tube: Ampulla.

1. Heterotrophic pregnancy
- Intrauterine + Ectopic pregnancy
- very rare earlier, with ART, incidence is increasing
- Management:
  - Viable I.U pregnancy → medical management is contraindicated
  - surgical.

Risk factors for Ectopic pregnancy
- H/o Tubal surgery (for fertility restoration or sterilization) : Highest risk.
- H/o salpingitis
- Previous ectopic
- Peritubal adhesions
- ART - due to infertility.
- contraception - Progesterone IUD / IUD
  \ Progestrone only pills
- salpingitis isthmica nodosa
- congenital tubal anomalies
- Advanced maternal age
- smoking.

Tubal Ectopic

- m.c type of ectopic pregnancy.
- Risk (see previous page) / Etiology.

clinical features

- Triad — vaginal bleeding
  - Abdominal pain.
  - Delayed menstruation / positive UPT.

Ruptured Ectopic : More severe symptoms and signs

- shoulder pain in hemoperitoneum
- Pallor, shock — Uterine rupture
- Abdominal tenderness
- Bimanual exam : cervical motion tenderness
- Tender boggy mass in the post. fornix (collected blood) Pouch of dough
- Cullen's sign. periumblical bluish discolouration, due to intraperitoneal bleeding.

Diagnosis : * clinical symptoms & signs

* investigation (βHCG)
- imaging studies - USG, colour doppler } on ruptured.

procedures : culdocentesis, Laproscopy.

Ruptured Ectopic

- clincal dx
  - most time as an emergency - surgical management
- If in doubt & patient stable
  - ultra sound (TVS) : Adenexal mass with free fluid.
  - culdocentaesis : Blood in Pouch of Douglas

Unruptured ectopic
- investigations play an important role

-TVS - intrauterine pregnancy
Gestation sac
✓. Eccentric (towards one side)
✓. intradecidual sign
✓ Double decidual sac sign
✓ Double bleb sign
✓. Yolk sac
✓. Fetal pole with cardiac activity

Sonographic finding : unruptured ectopic:
[Pseudosac - not well defined
- central]

Bagel sign in adnexal

Ring of Fire sign - in doppler.
- unruptured uterus ✓
- corpus luteal cyst ✓

Role BhCG in ectopic pregnancy
- level of B hCG - decide mode of mangement
- doubleing time (intrauterine pregnancy ∴ BhCG : double (>60%) every 48 hours
- Discriminatory zone.
↳ level of serum hCG - 1500-2000
can see intrauterine pregnancy in TVS

Positive UPT + pain + Bleeding → 6000 (TAS)

stable → TVS
unstable → Surgical management

TVS
↓ intra uterine pregnancy
↓ non diagnostic → pregnancy of unknown location.
↓ Ectopic pregnancy.

↓

serum Bhcg ~~doubling~~ at one 48 hour

↓ Doubling (>60% increase)

↓

Intrauterine pregnancy

(Repeat can once Bhcg crosses the discriminatory zone)

↓ Falling (>15% decrease)

↓

Falling PUL

↓

weekly BhCG till disappear.

↓ Sub optimal increase or decrease

↓

? Ectopic pregnancy

↓

weekly Bhcg

↓

Discriminatory zone reached. IU confirmed.

Suboptimal rise/fall or plateauing

↓

Ectopic — Persisting PUL

give methotrexate.

History, examination, investigation

↓

unruptured

↓

Expectant | medical | surgical

Ruptured. → surgical

surgical → Laparoscopy | Laparotomy

↓

Conservative (Salpingostomy) or Salpingectomy

Expectant management

- clinically stable with no pain
- serum βhcg < 1000 IU/L
- Tubal ectopic <35mm with no visible heartbeat
- Table to return for follow

No pain in giving 1000Rs & returning it in 35days

Medical magement

An unruptured ectopic pregnancy with

1. Hemodynamicslly stable
2. No significant symptoms
3. Gestational sac size <3.5 cm
4. No visible cardiac activity
5. serum β hcg < 5000 IU/L
6. No. contraindication to methotrexate → Anemia, BM suppression, CKD, CLD, Peptic ulcer.

Dosing - Single dose Regime
- multiple dose regime

Surgical management.

- 1. Significant pain
- Adnexal mass of 35 mm or larger
- Fetal heart best visible on an USG.
- serum hcg level of 5000 IU/L or more.

lot of pain in heart giving more 5000₹ not returned in 35days

* salpingostomy - conserving tube
* salpingectomy.
  - family complete
  - ectopic at previous ectopic
  - ectopic @ tubaligation

Ovarian ectopic — spigelberg criteria

- Tube on affected side must intact.
- gestation sac must occupy the position of ovary.