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BLEEDING EARLY IN PREGNANCY [1ST TRIMESTER BLEEDING]

CASE SENARIO

- Mrs x 21 years, married for 8 months, came to emergency unit of the obstetrics & gynecology department mansoura university hospital complaining of vaginal bleeding, with lower abdominal pain. She missed her menses for 2 weeks.urine prgnancy test revealed positive.

THE APPROACH

- What are the possibilities?

1-Miscarriage (abortion)

2- Molar pregnancy

3-ectopic pregnancy

4-gynecologic cause

5-general cause

Item	Miscarriage [Abortion]	Ectopic pregnancy	Molar pregnancy
Clinical	•Diagnosed pregnancy • Bleeding • Pain	•Short or no amenorrhea • Bleeding • Pain+/- syncop	•Diagnosed preg • Bleeding (prune juice) • +/-passage vesicles
Ultrasound (tvs better)	•I.U fetus or remnants of conception	•Empty uterus • ? Adnexal GS • ? Free pelvic fluid (blood)	•No fetus • Snow storm appearance
ß-HCG	•Proportionate to the GA or lesser	•No doubling within 48 h	•Markedly elevated than expected for GA

MISCARRIAGE (ABORTION)

- Symptoms : bleeding, pain
- Signs:uterine size , cervix
- Ultrasound: uterine contents, fetal cardiac activity
- B- HCG estimation, repeat after 48 hours

Clinical types of abortion.

Type	Bleeding	Discharge	Ut. size	cx. os	Fever	Septicemia
1.Threatened	+	-	= amenorrhea	closed	-	-
2.Inevitable	+++	-	< amenorrhea	open	-	-
3.Incomplete	++	-	< amenorrhea	open	-	-
4.Complete	+	+	< amenorrhea	closed	-	-
5.Missed	+	++ brown	< amenorrhea	closed	-	-
6.Infected	Any	Pus	Any	Any	+	-
7.Septic	any	Pus	Any	Any	++	+

8.Cervical abortion **is a sub-type of inevitable abortion in which the products of conception are in the cervical canal.**

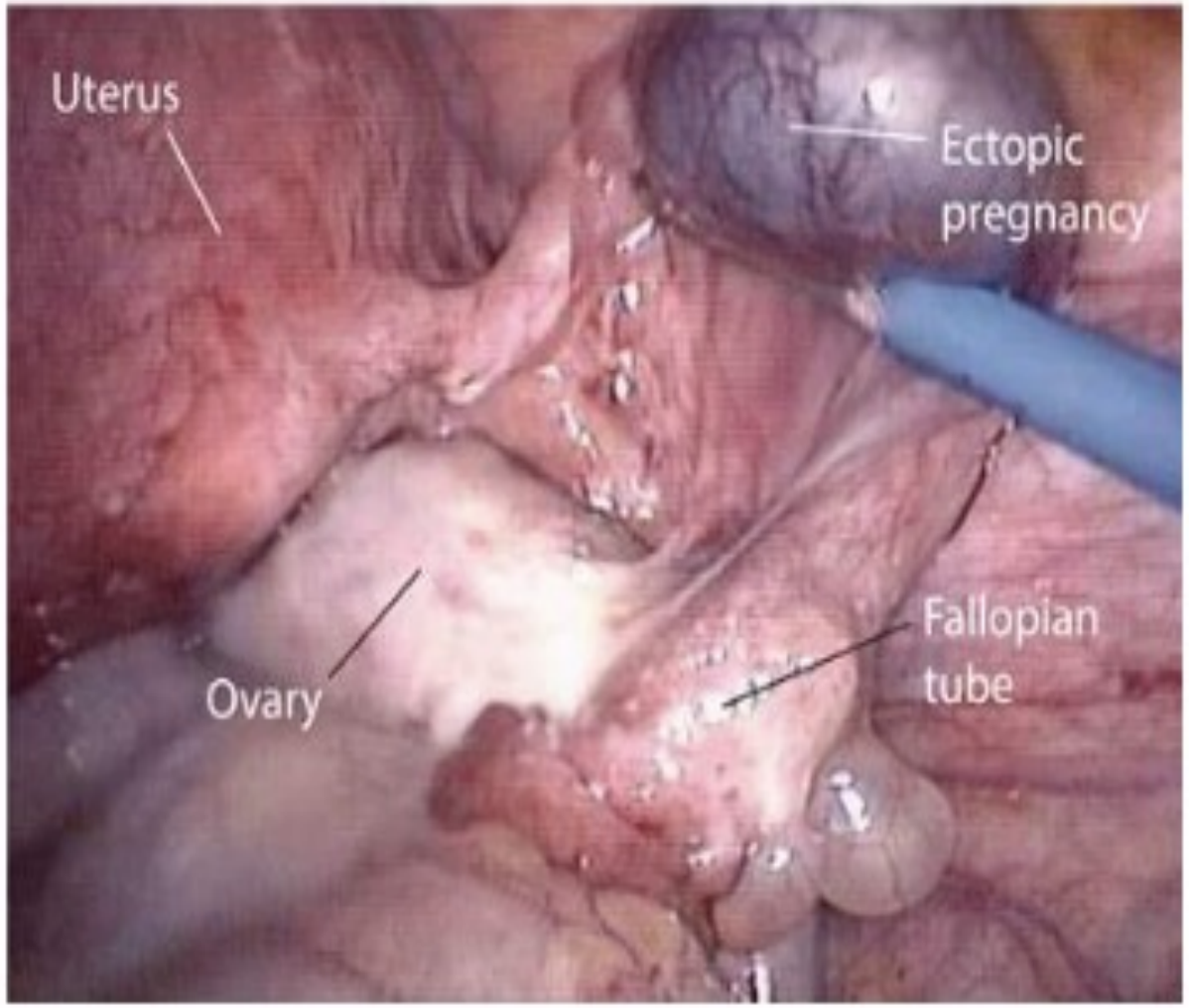
VESICULAR MOLE [MOLAR PREGNANCY)

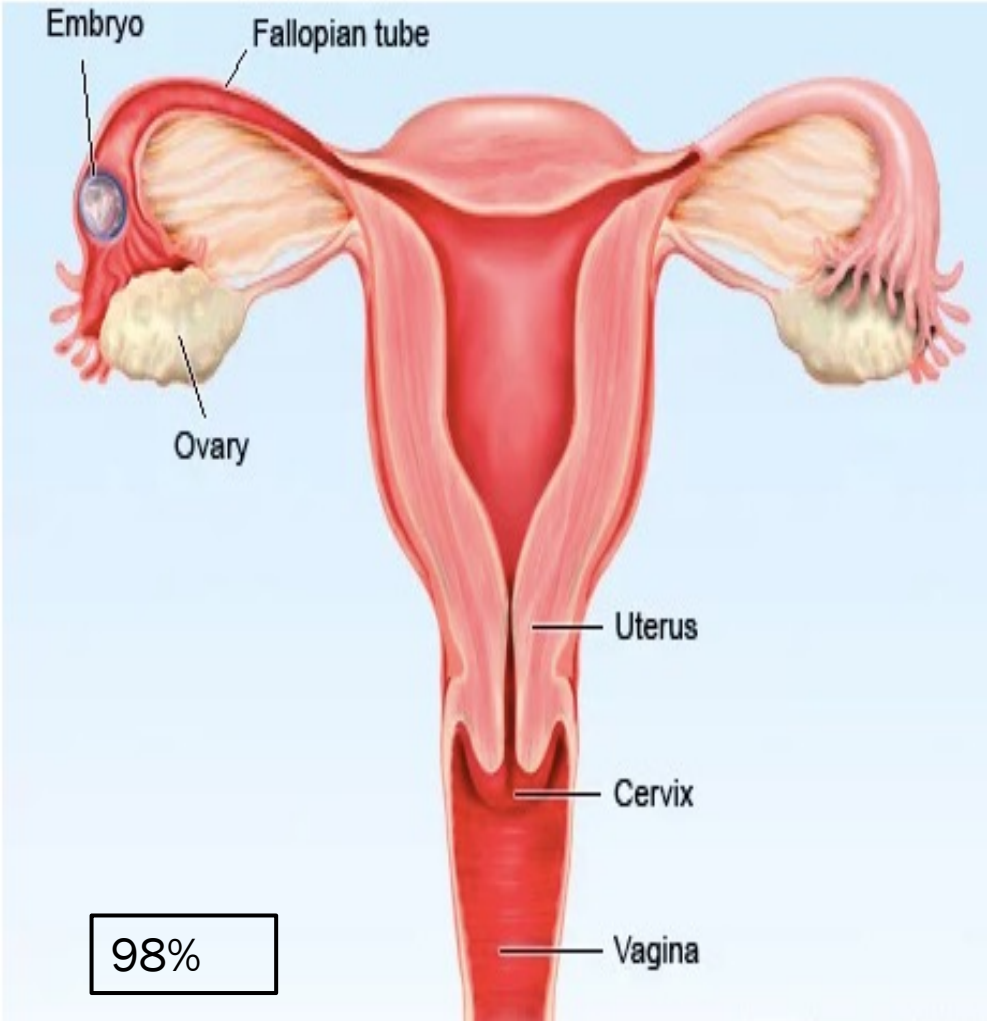
- Complete VM.:easily diagnosed
- Incomplete mole; commonly diagnosed as missed abortion, diagnosis is essentially histological

Characteristic	Partial mole	Complete mole
Development	Some fetal development but malformed	No fetal development (cord, membrane present)
Villi	Some enlarged; two populations of villi Blood vessels and fetal red blood cells present Scalloped outlines with pseudoinclusions and invaginations Focal trophoblast proliferation Minimal trophoblast atypia	All enlarged Blood vessels absent Round to ovoid Prominent cisterns Circumferential trophoblastic proliferation Trophoblast atypia present
Origin	Both maternal and paternal	Paternal only
Genetics	Triploid	Diploid (or tetraploid)
p57 IHC stain	Positive	Negative

ECTOPIC PREGNANCY

- **Ectopic pregnancy (EP)** is defined as implantation of a pregnancy outside the normal uterine cavity.
- Over 98% implant in the fallopian tube. Rarely , ectopic pregnancies can implant in the interstitium of the tube, ovary, cervix, abdominal cavity or in cesarean section scars.
- **A hetero-tropic pregnancy** is the simultaneous development of 2 pregnancies: one within and one outside the uterine cavity


Uterus
Ectopic pregnancy
Ovary
Fallopian tube


Embryo
Fallopian tube
Ovary
Uterus
Cervix
Vagina
98%

CLINICAL PRESENTATION

- The majority of patients with EP present with a subacute clinical picture of abdominal pain and/or vaginal bleeding in early pregnancy.
- Rarely, patients present very acutely with tubal rupture with massive intra-peritoneal hemorrhage. The free blood in the peritoneal cavity can cause diaphragmatic irritation and shoulder tip pain.

CLINICAL PRESENTATION

- The *diagnosis of ruptured EP* is usually clear as they present with signs of acute abdomen and hypovolemic shock with a positive pregnancy test.
- It is, however, important to be aware that it is common for women to experience bleeding or abdominal pain with a viable intra-uterine pregnancy.

CLINICAL PRESENTATION

'In any woman in the childbearing period coming with lower abdominal pain, vaginal bleeding +/- hypovolemic shock *ectopic pregnancy should be the 1st differential diagnosis* and pregnancy test is a must.'

INVESTIGATIONS

- *Clinical evaluation is of utmost importance*.
- **TVUSS**: identification of an intrauterine pregnancy (intrauterine GS, YS +/- fetal pole) effectively exclude the possibility of EP in most patients except in those patients with rare heterotropic pregnancy.
- A TVUSS showing an empty uterus with an adnexal mass has a sensitivity of 90% and specificity of 95% in diagnosis of EP.
- The presence of moderate to significant free fluid during TVUSS is suggestive of ruptured EP

INVESTIGATIONS

- **Serum hCG:** the serum hCG level almost doubles every 48 hours in a normally implanted pregnancy.
- In patients with EP, the rise of hCG is often suboptimal. However, hCG levels can vary widely in individuals and thus consecutive measurements 48 hours apart are often required for comparison purposes.

OTHER CAUSES:

- Gynecological causes : vulvar trauma, coital trauma, cervical erosion, cervical polyp, acute vaginitis, cancer cervix with pregnancy .
- General causes: bleeding tendancies, hepatic failure, anticoagulants.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ngiyabonga
dziękuję
ありがとう
merci
suksema
danke
thank
you
baie dankie
धन्यवाद
molte grazie
gracias
takk
obrigada
obrigado
gràcies
dank u
tänan
teşekkür ederim
شكرا
tack så mycket
teşekkür ederim
mahalo