

## Female Genital System

Dr.Noor Sabeeh , 4<sup>th</sup> lecture 2022/2023

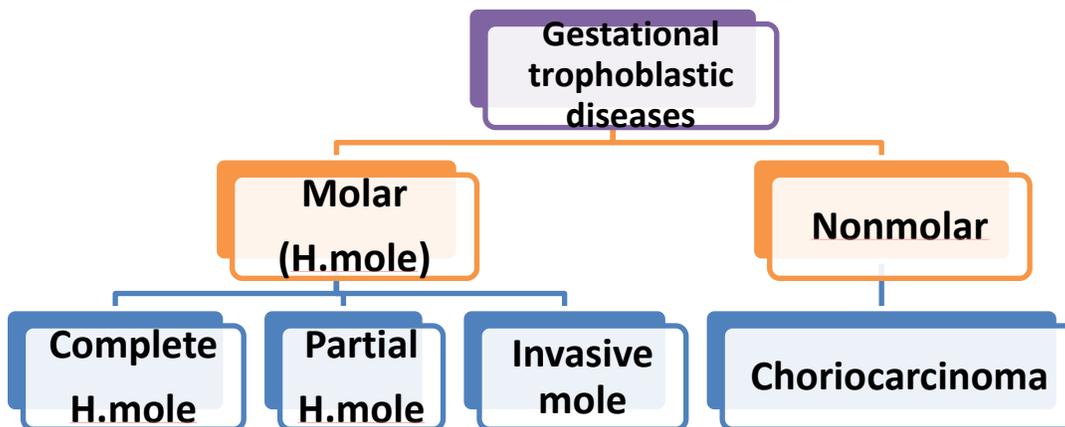
### Diseases of pregnancy

- **Ectopic Pregnancy**

- Defined as implantation of a fertilized ovum in any site other than the uterus.
- 90% occurs in the fallopian tube (tubal pregnancy); other sites include the ovaries and the abdominal cavity.
- Can be caused by any factor that retards passage of the ovum through the fallopian tube. Such as chronic inflammation and scarring in the oviduct; intrauterine tumors and endometriosis.
- Rupture of an ectopic pregnancy causing acute abdomen and shock.

- **Gestational trophoblastic disease**

- **Abnormal proliferation of fetal trophoblast cells, characterized by elevated blood and urine HCG level higher than normal pregnancy.**  
The WHO divides these diseases into two categories:



### Hydatidiform mole

- It is a benign gestational trophoblastic proliferative disease characterized by a Voluminous mass of swollen **cystically dilated** chorionic villi appear as **grape like structure**
- Before 20, after 40 years.
- **History of mole increase the risk for molar diseases in subsequent pregnancies**
- Larger for dates uterus
- **High HCG.**
- **Two types both result from abnormal fertilization:**

- 1. Complete H.mole:** fertilization of an empty ovum by diploid sperm or two sperms resulting in diploid 46xx, 46xy karyotype ( **paternal origin**)
- 2. Partial H.mole:** fertilization of normal ovum by diploid sperm or two sperms resulting in Triploid 69xxy karyotype

Complete mole	Partial mole
<ul style="list-style-type: none"> <li>diploid 46xx, 46xy</li> </ul>	<ul style="list-style-type: none"> <li>Triploid 69xxy</li> </ul>
<ul style="list-style-type: none"> <li>All villi are abnormal</li> </ul>	<ul style="list-style-type: none"> <li>Some villi are normal</li> </ul>
<ul style="list-style-type: none"> <li>No fetal parts</li> </ul>	<ul style="list-style-type: none"> <li>Fetal parts are present</li> </ul>
<ul style="list-style-type: none"> <li>Diffused circumferential trophoblastic proliferation</li> </ul>	<ul style="list-style-type: none"> <li>Focal trophoblastic proliferation</li> </ul>
<ul style="list-style-type: none"> <li>Serum and tissue HCG markedly elevated</li> </ul>	<ul style="list-style-type: none"> <li>Slight elevation</li> </ul>
<ul style="list-style-type: none"> <li>Risk of choriocarcinoma 2%</li> </ul>	<ul style="list-style-type: none"> <li>rare</li> </ul>

### Grossly

Expanded uterus by friable mass of translucent cystic vesicles contains clear watery fluid (hydrobically swelling). No fetal parts in complete mole, common in partial mole

### Microscopically

- Hydropic swelling of chorionic villi which consist of loss edematous connective tissue core
- No fetal blood vessels in complete mole, while present in partial mole
- Proliferation of both cyto and syncytio trophoblast

### Gestational choriocarcinoma

- highly aggressive malignant tumor
- Arise either from gestational chorionic epithelium.
- 50% follow H. mole, 25% follow abortion and the remainder after normal pregnancy
- High level of serum and urine HCG
- Wide spread to lungs (cannon ball appearance on X-ray), brain, liver, vagina.....
- The abnormal the conception the more risk of choriocarcinoma