

**#MADEEASY**



**FEMALE  
GENITAL TRACT: CANCERS**





## FEMALE GENITAL TRACT: **CANCERS**

### **Cervical cancer**

#### **Risk factors**

- **Infection by HPV 16 & 18**
- **Smoking**
- **Prolonged OCP use**
- **Early sexual activity (<21 years)**
- **Immunodeficiency**
- **Cervical cancer is most commonly caused due to infection by Human Papilloma virus.**

#### **Clinical presentation**

- **Asymptomatic**
- **Dyspareunia**
- **Postcoital bleeding/ vaginal bleeding**  
**Vaginal discharge**



# Types



## ***Squamous cell cancer***

- ***Abnormal squamous cells have large, irregular nuclei.***
- ***Precursor lesion: cervical intraepithelial neoplasia (CIN)***
- ***Tip to remember: Cervix and Squamous both start with an 's' sound. Mail feature is bleeding after 'S'ex. Precursor is CIN (pronounced as 's'in)***
- ***Adenocarcinoma***





# Endometrial cancer

1. **Post-menopausal bleeding**
2. **Types**

## **Type 1**

- **Also known as endometrioid type**
- **Caused by excess estrogen exposure/hyperplasia**
- **Associated with PTEN mutation**
- **Type 1 can be imagined as a fat cat that now weighs ten kgs.**

## **Type 2**

- **Also known as non-endometrioid**
- **Estrogen-indepent**
- **Caused by endometrial atrophy**
- **Associated with p53 mutation**
- **Has types: clear cell & serous.**
- **Type 2 can be imagined as a skinny & thin cat that used to weigh 5 kg but now only weighs 3 kgs.**





# Ovarian cancer

## *Clinical presentation*

- **Abdominal pain/distention**
- **Abnormal uterine bleeding**
- **Sister Mary Joseph nodules (umbilicus)**
- **Surface epithelial cell tumours: MC ovarian cancer, aka Ovarian Adenocarcinoma, can be benign or malignant.**

**Mnemonic: Cancer Enters Body Mind Soul**

## *Clear cell*

- **Large cells with clear cytoplasm**

## *Endometrioid*

- **Associated with Endometriosis**
- **Filled with chocolate coloured blood, aka Chocolate cysts.**





# Ovarian cancer

## **Mucinous**

- **Lined by tall columnar epithelium secreting mucus**
- **Usually, unilateral**
- **Causes Pseudomyxoma peritonei (accumulation of mucus in the peritoneum)**

## **Serous**

- **MC benign ovarian tumour, MC bilateral malignant ovarian tumor.**
- **Usually, bilateral**
- **Malignant adenocarcinoma associated with Psammoma bodies.**
- **Ovaries are quite SERIOUS most of the times.**





# Germ cell tumours

## *Dysgerminoma*

- **Analogous to Seminoma in males.**
- **MC germ cell tumor, MC malignant ovarian tumor.**
- **Marker: LDH**
- **Clear cytoplasm surrounding central nucleus.**
- **Associated with Endometriosis, PCOS, BRCA1/BRCA2 mutation.**

## *Teratoma*

- **Arise from totipotent cells, more than 1 germ cell layer**
- **May contain hair, teeth, nails etc**
- **Mature teratoma: Dermoid cyst**
- **Teratoma is Totipotent and has Teeth.**







# Germ cell tumours

## **Yolk sac tumour**

- **Also known as endodermal sinus tumor**
- **Schiller-Duval bodies are found: germ cells around blood vessel.**
- **Positive for AFP (alpha fetoprotein)**
- **Tips to remember: the Alpha Fetus is a Chiller in the Yolk Sac**

## **Choriocarcinoma**

- **Arises from trophoblastic tissue from intrauterine pregnancy/ectopic/retained placental bits/molar pregnancy.**
- **Produces beta-HCG**
- **Highly malignant and vascular tumor with metastasis to lungs, brain etc.**
- **Malignant cells are lightly-stained, large cytotrophoblasts.**
- **Arises from placental tissue hence everything is related to placenta.**







## Sex-cord stromal tumours

### **Sertoli-Leydig cell tumours**

- **Secretes androgens (hirsutism)**
- **Microscopic finding: Reinke crystals are characteristically found (these are eosinophilic inclusions)**

### **Granulosa-theca cell tumour**

- **Secretes estrogen (endometrial hyperplasia).**
- **Microscopic finding: Call-Exner bodies are found.**
- **You should always pick up Granny's Call.**

