

Endometrial Carcinoma

* Cancer of the inner layer of the uterus (Endometrium)

* Early diagnosis \rightsquigarrow Better prognosis

* **Most Common** female pelvic malignancy

* **90% Adenocarcinoma**

* **↑ exposure to Estrogen**

* Risk Factors :- ① Postmenopausal (60 years) ② Nulliparous ③ Late menopause, Early menarche

④ Hyperestrogen state due to ^{أسباب} **Obesity** ⑤ Diabetes Mellitus

⑥ Diet rich in fat ⑦ Ovarian tumors (**Excessive Estrogen**)

⑧ Hormon Replacement Therapy (Estrogen alone)

⑨ Endometrial hyperplasia (Atypical > Glandular > Cystic)

⑩ Tamoxifen (used for treatment of Breast cancer)

* Pattern of Spread :- ① Direct extension ② Lymphatic ③ Hematogenous

* Pathology :-

- Gross features \rightarrow ① **Diffuse type** :

- **most of endometrium is involved**

- polypoidal growths appear with ulceration & necrosis

- **Pyometra** (accumulation of pus in the uterus)

- in advanced stages growth penetrate into Myometrium & rarely reach Serous surface

- involvement of Myometrium cause \rightarrow enlargement of the uterus

② **Localized type** :

- **Limited to a small area**

- polypoidal growths appear with ulceration & necrosis

- in advanced stages growth penetrate into Myometrium & may extend to the cervical canal & peritoneal covering

- Microscopic picture \rightarrow

- **90% Adenocarcinoma**

- **10% Squamous Cell Adenocanthoma**

- **will differentiated**

- **all grades of endometrial hyperplasia are seen**

* Staging :- (Intra-operative → frozen section)

stage **1A** Tumor reach **less** than $\frac{1}{2}$ of myometrium (Well differentiated)

* the only stage that need **Simple surgery** (Total Hysterectomy + Bilateral Salpingo-oophorectomy)

* **No** need lymphnode dissection, **No** need adjuvant radiotherapy

stage **1B** Tumor reach **more** than $\frac{1}{2}$ of myometrium

* Total Hysterectomy + Bilateral Salpingo-oophorectomy + **lymphnode dissection** (pelvic+para-aortic)

stage **1C** Tumor reach **Serosa** need adjuvant radiotherapy

stage **2** Tumor reach **Cervix** → **Hematometra** (accumulation of blood in uterus)

stage **3** **Lymph node** involvement (Pelvic or Para-aortic)

stage **4** **Metastasis**

* Clinical Presentation :-

- 1** **Bleeding** → post menopausal bleeding 75%
in premenopausal patients → irregular menstruation, menorrhagia
- 2** **Vaginal discharge** → brownish or blood stained
- 3** **Asymptomatic (painless)**
- 4** **Pain** → indicate metastasis & advanced growth

* Diagnosis :-

- definitive diagnosis by **Endometrial Biopsy**

- Hysteroscopy directed biopsy → diagnostic & therapeutic
- D&C biopsy → blind biopsy
- office biopsy → (Pipelle biopsy) → useful for patients who are unfit for surgery or anesthesia
- **US** → endometrium > 5 mm in thickness
- **MRI** → for metastasis
- **CA 125** → nonspecific

* Other Differential Diagnosis of Post Menopausal Bleeding :-

- 1** **Atrophic vaginitis** (*most common cause)
- 2** **Estrogen therapy**
- 3** **Cervical polyp**

* For young female who is seeking for pregnancy or who unfit for surgery → high dose of Progesterone + Mirena (IUD)