

2^{ed} PBL
FEMALE GENITAL
SYSTEM PATHOLOGY

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PBL 1

A 30-year-old woman has noticed abdominal swelling for 1 year with no abdominal pain and normal bowel habit, but feels nauseated when she eats large amounts. She has urinary frequency but no dysuria or hematuria. Her periods are heavy regular, with clots and flooding.

Abdominal Examination

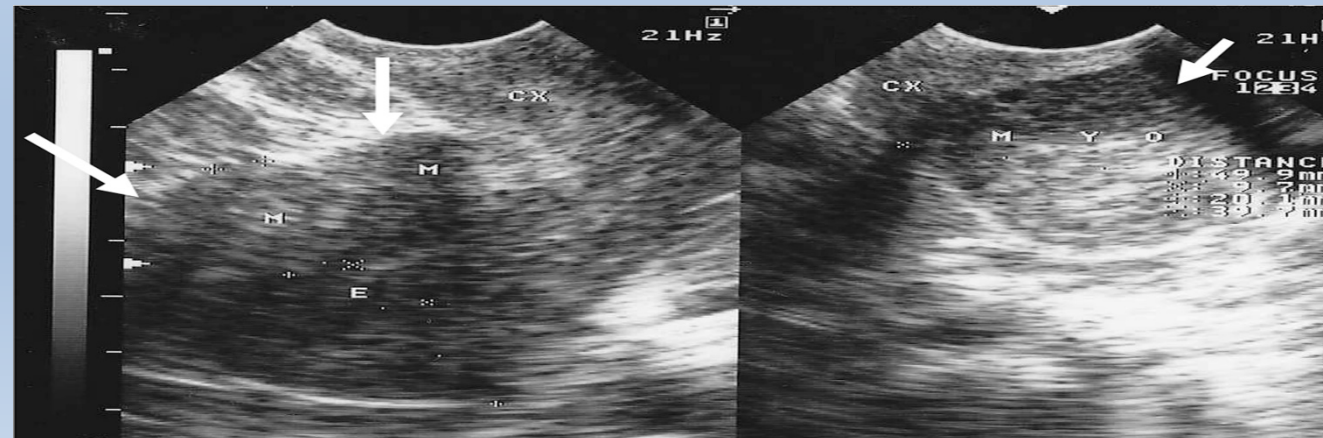
The woman has a very distended abdomen, with a smooth firm, non-tender and mobile mass is palpable extending from the symphysis pubis to midway between the umbilicus and the xiphisternum (equivalent to a 32-week size pregnancy).

Speculum vaginal examination is not significant.

Bimanual pelvic examination reveals a non-tender firm mass occupying the pelvis.

Investigations

Pt is anemic and ultrasound revealed multiple masses occupied the uterine wall.



Diagnostic laparoscopy finding is as in picture :-

- Q1 --- What is your diagnosis ?



Q1 – Answer

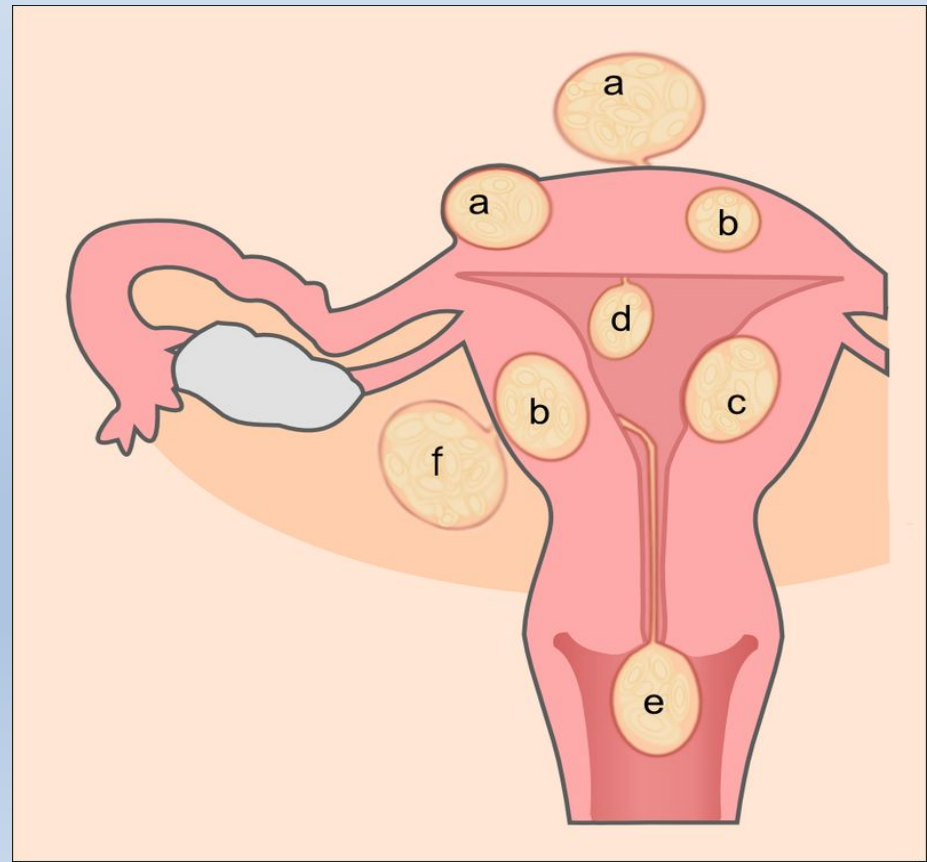
The woman has a large uterine fibroid (leiomyoma). This is causing menorrhagia and hence the microcytic anemia from iron deficiency. Urinary frequency occurs due to the pressure of the large mass on the bladder. It is also likely that the fibroid is accounting for her infertility history, although this warrants investigation as a separate problem.

Q2 – what are the anatomical types for this tumor??

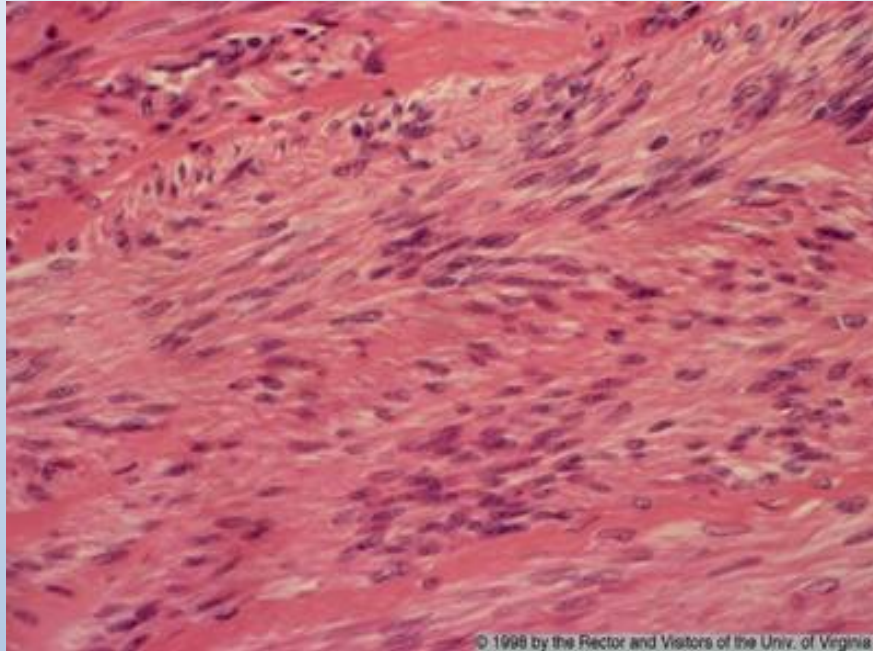
A:-

▪ **Anatomically** Leiomyoma
can occur as

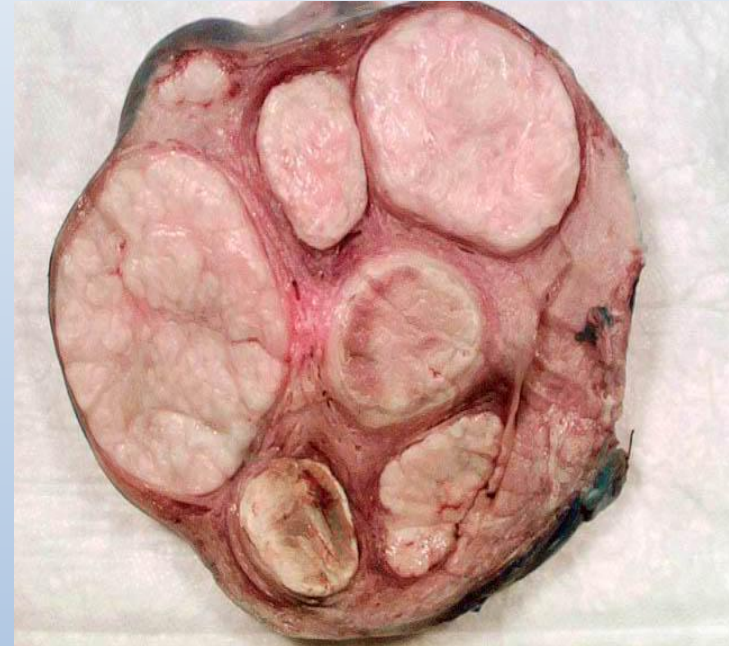
- ◆ A = Subserosal fibroids
- ◆ B = Intramural fibroids
- ◆ C = Submucosal fibroid
- ◆ D = Pedunculated submucosal fibroid
- ◆ E = Cervical fibroid
- ◆ F = Fibroid of the broad ligament



Q3 – after excised the tumor with uterus, the tumor gross & hitology appears as picture , Describe the characteristic featurrs for this tumor



Microscopically :- well differentiated, regular spindle-shaped smooth muscle cells associated with hvalinization



Gross :- Cut surfase whorled appearance

- **PBL 2**

A 43-year-old nulliparous woman reports a two-month history of abdominal bloating and constipation. Her family history is notable for a sister diagnosed with breast cancer at age 45, and a paternal aunt who died of ovarian cancer at 50.

Her physical exam is non-specific and normal.

Abdominal exam show abilateral tenderless cystic adnexal mass.

Ultrasound confirm a bilateral complex ovarian cyst.

- **Q1 --- What are the likely differential diagnosis?**
- **Q2 --- What is most likely composition & original tissue for this tumor ?**

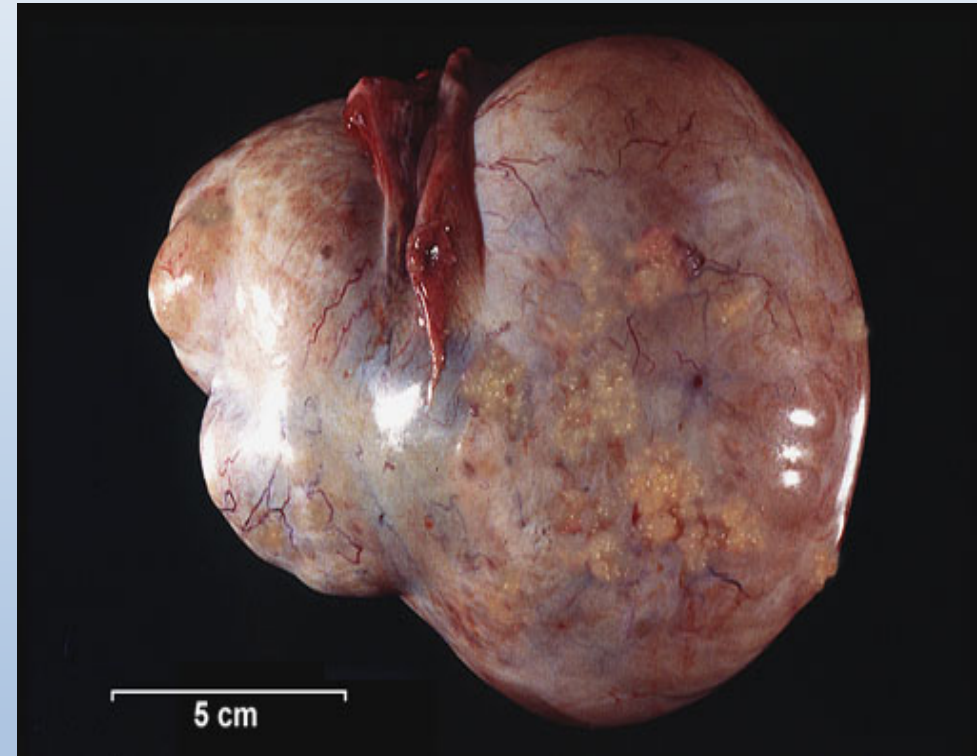
- **Q1 --- A –**
- **Primary ovarian tumor**
- **Secondary ovarian tumor**

- **Q2 ---- A –**
- **Epithelial derived ovarian tumor**
- **5 basic histological groups resembling normal epithelia in the urogenital tract:-**
 1. **SEROUS**-----Fallopian tube 42%
 2. **Mucinous**. -----Cervix 12%
 3. **Endometroid**. -----Endometrium 15%
 4. **Brenner's**. Transitional epithelium 2%
 5. **Mixed variety**: 6%

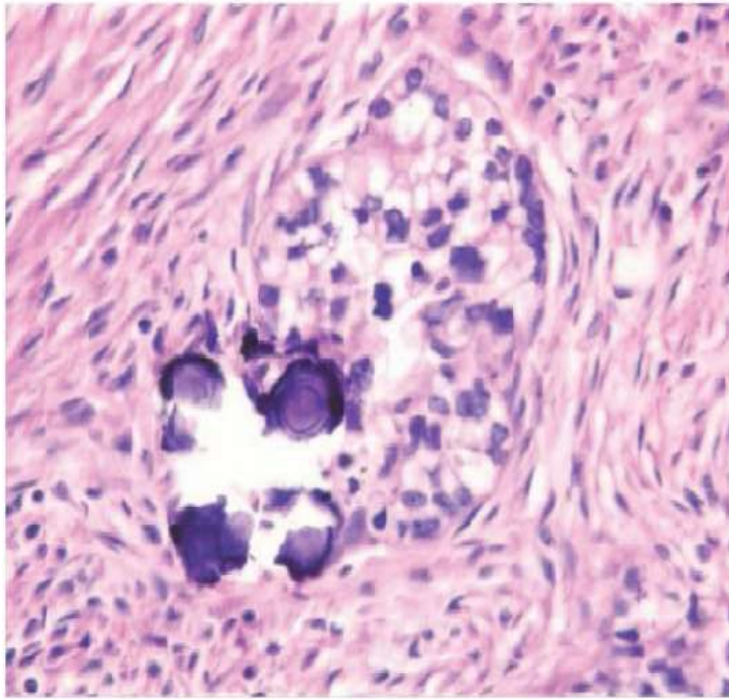
- CONTINUE:-
- On cystectomy the lesions appear mostly composed of solid tissue and has invaded outside of the ovary, with papillations seen over the surface.

Q3 --- What is the most likely diagnosis?

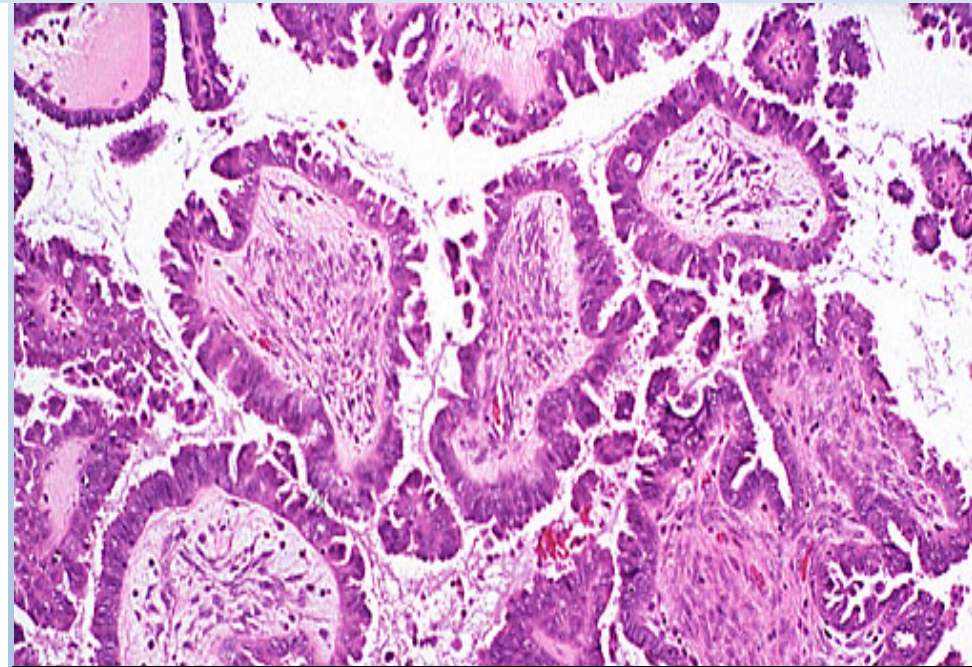
Q5 --- What is the characteristic microscopical finding could be seen under microscop ?



- Q4 --- A –
- **Serous ovarian tumors**
- Q5 --- A –



**small concretions called
.psammomma bodies**



**Here is a serous cystadenocarcinoma in
which there is more pronounced
papillary growth with more
.hyperchromatic cells**

PBL 3

A 21-year-old student presents with left iliac fossa and lower abdominal pain. The pain started about 6 months before and has gradually become more frequent and severe. It is no worse with her periods .

Examination

The woman is slim and the abdomen is soft with a palpable mass in the left iliac fossa. This is firm and feels mobile. It is moderately tender.

Speculum examination is normal.

Bimanual examination confirms **an 8 cm mass in the left adnexa**. The uterus is palpable separately and is mobile and anteverted. The right adnexa is normal.

Imaging study is performed :- An abdominal X-ray & Transvaginal ultrasound scan show appearance is of mixed echogenicity with 'acoustic shadowing'

Cystectomy is performed revealed cyst in this two pictures :-



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- Q1- What is your diagnosis for this tumor ?
- Q2- What is composition & original tissue for this tumor ?
- Q3- What is its risk to be malignant or developing malignancy ?
- Q4- describe its histological composition



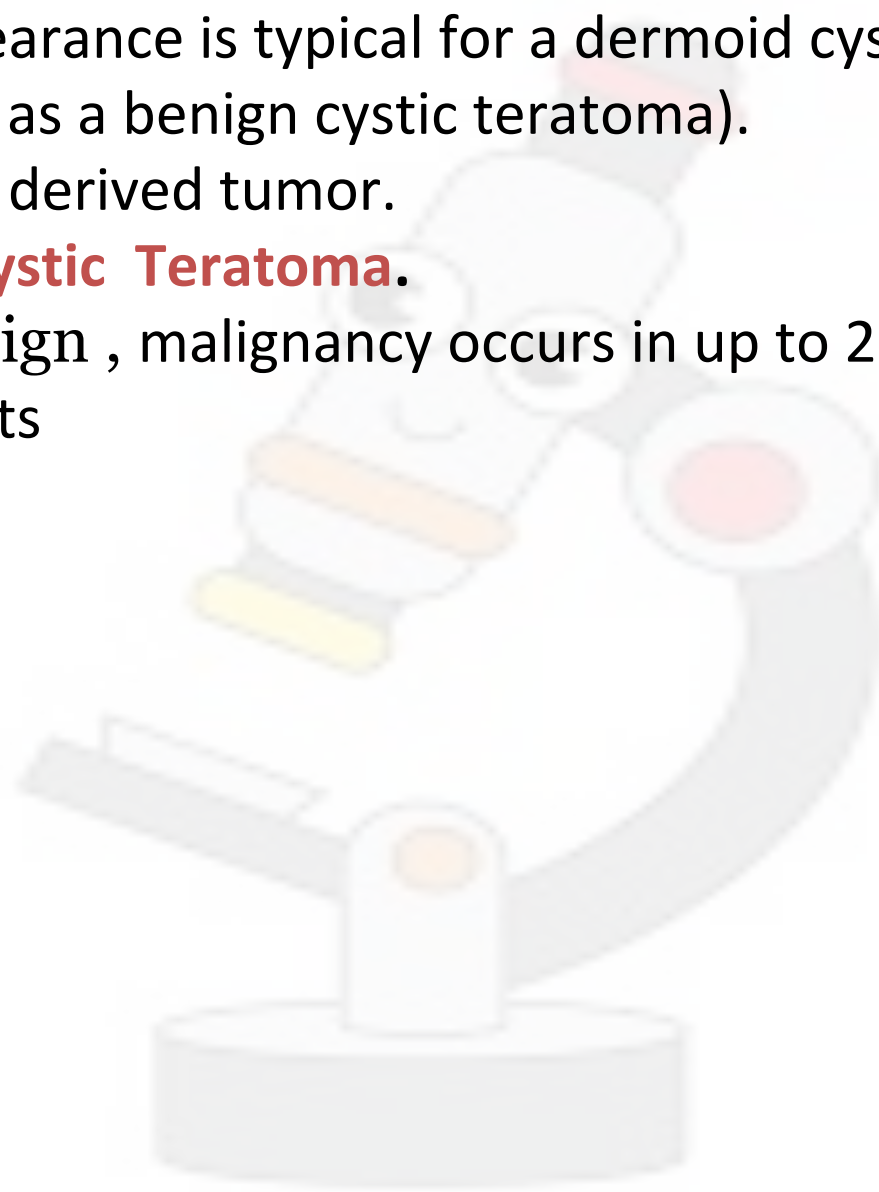
– A –

1- This appearance is typical for a dermoid cyst (also known as a benign cystic teratoma).

2- Germ cell derived tumor.

3- **Mature cystic Teratoma.**

usually benign , malignancy occurs in up to 2 per cent of dermoid cysts

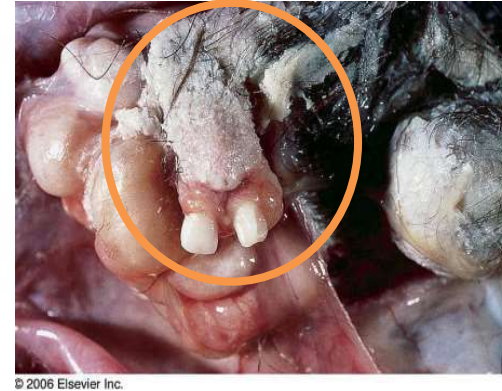
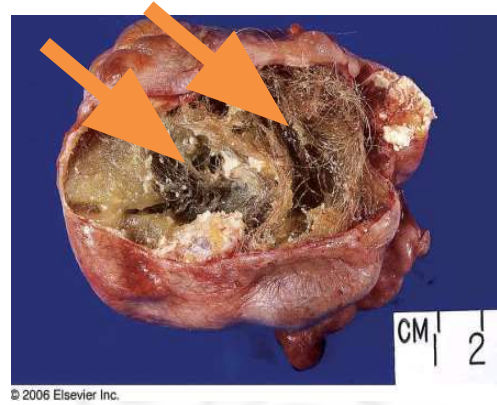


Mature benign cystic teratoma (dermoid cyst).

- Is the most common ovarian germ cell tumor and the most common type of ovarian teratoma
- Also most common ovarian tumor < 20 Ys

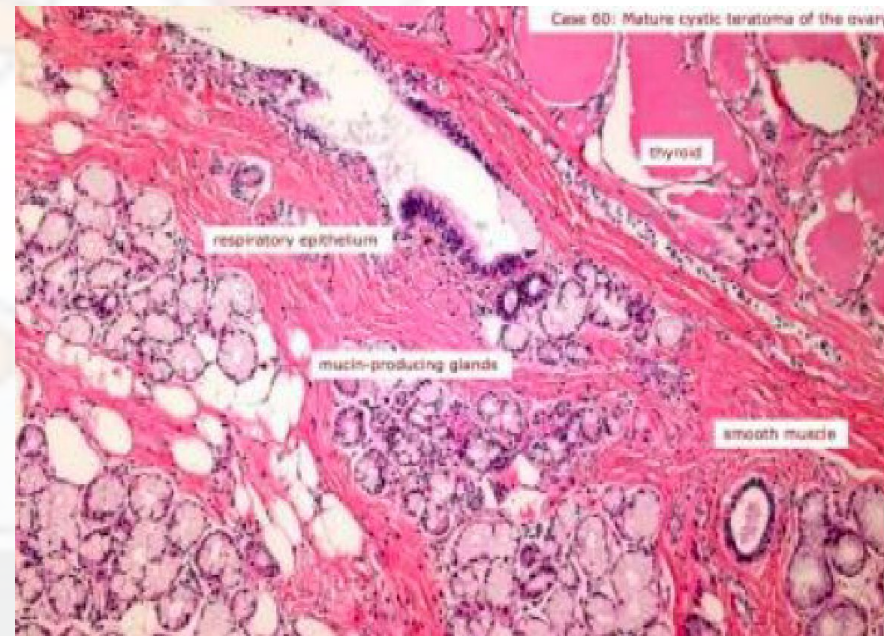
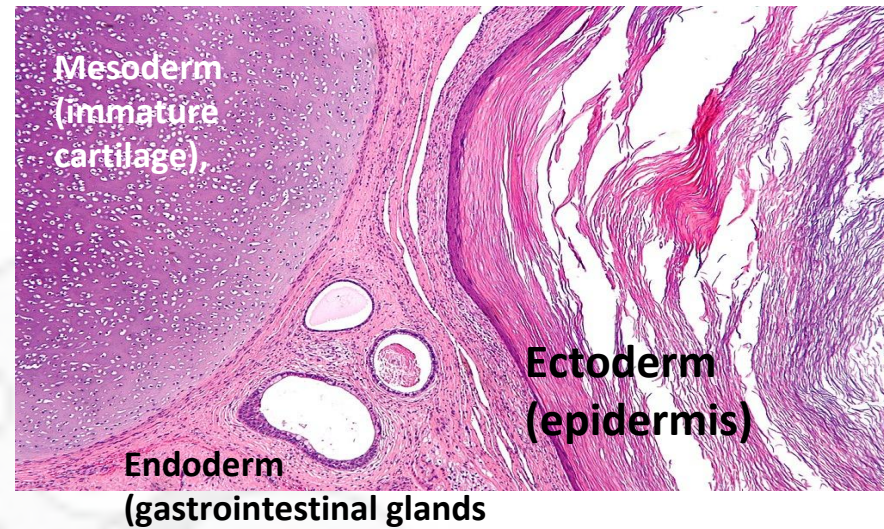
(The most common ovarian tumor is surface epithelial cell tumors and the most common ovarian germ cell tumor: mature cystic teratoma).

- 90% unilateral.
- Usually benign.
- **Composed of mature elements of the ectoderm, endoderm and mesoderm and is a cystic tumor, filled with sebaceous material and hair and occasionally teeth.**
- **Usually these tumors contain cysts lined by epidermis with adnexal appendages—hence the common designation dermoid cysts**
- The vast majority of such tumors are cured by excision; 1% undergo malignant transformation, most commonly as squamous cell carcinoma.
- Complications include: torsion, rupture (hemorrhage), infection etc



On cut section, they often are filled with sebaceous secretion and matted hair that, when removed, reveal a hair-bearing epidermal lining . Sometimes there is a nodular projection from which teeth protrude. Occasionally, foci of bone and cartilage, nests of bronchial or gastrointestinal epithelium, or other tissues are present.

- Cystic cavities lined by mature epidermis as ectodermal derivatives
 - * skin appendages (sweat & sebaceous glands & hair follicles)
 - * neural (particularly glial) tissue
- Also mesodermal derivatives :
 - * cartilage
 - * Muscles
 - * Bones
- Endodermal derivatives :
 - GIT , RT , Thyroidetc.



THANK YOU
FOR YOUR
ATTENTION