

OVARIAN TUMOR

- 2nd most common gynecologic malignancy.
- Occur in Reproductive Age.

CLASSIFICATION.

Most ovarian tumors arise from 3 major components

- Multipotent surface / → directly or indirectly from Mullerian epithelium.
- Multipotent germ cell
- Sex-cord stromal cells

Classification → Epithelial tumor

→ Serous

→ Mucinous

→ Endometrioid

→ Clear cell carcinoma

→ Brenner tumor

→ Seromucinous tumor

→ Undifferentiated carcinoma.

2) Germ cell tumor

→ Heterotactoma

→ Immature teratoma

→ Dysgerminoma

→ Mole-se tumor

3) Sex-cord - tumor

→ Fibroma

→ Thecoma, Granulosa cell tumor

4) Metastatic tumor to the ovary

- Krukenberg tumor

- from breast, colon, endometrium

→ Based on the extent of proliferation of epithelium.
↳ benign, borderline, and malignant

Various epithelial tumor of the ovary.

Type I → Low grade, KRAS, BRAP,
Progress from benign to borderline.

Benign

Type II (high grade) → Assoc to serous intraepithelial carcinoma
TP53 mutations.

Borderline

Malignant

SEROUS TUMOR:

Age Risk → Nulliparous, BRCA1, BRCA2 mutations

Oral contraceptive if stabilization ↓ the Risk

GRADE → Low grade: Mutations KRAS, BRAP

High grade: TP53 Mutations.

MORPHOLOGICAL: Benign serous cystadenoma

Gross:

1 to 10 cm in diameter

→ Cystic tumor: one or more thin walled cyst
content: clear water serous fluid

→ Bilaterally is common.

→ Cut section: smooth outer And inner glistening surface

MICROSCOPY:

- cysts lined by nonstratified ~~or~~ stratified cuboidal to ^{columnar} psammoma bodies → dystrophic calcification.
- papillae with fibrovascular core.
 - ↳ more common is malignant.

MORPHOLOGY: Borderline ovarian tumors

Gross: > 5cm

Show cavities filled by densely packed papillary projections.

Micro: greater epithelial proliferation and cytological atypia.

- Complex branching papillae.
- Stratification of epithelium.
 - Budding or cellular tufting.
 - Mild to Moderate cytological atypia.
 - ↑ mitotic activity.
 - ★ - Psammoma bodies.
 - Absence of stromal invasion.

MORPHOLOGY: Malignant ovarian tumor

Low grade

High grade

LOW GRADE

Gross → usually bilateral show papillary growth.

Micro → They include single cells and small nests of irregular shape infiltrating the stroma.

High grade

endo →

__/__/__

- usually bilateral, large and exophytic
- solid mass show papillary growth
- cysts may contain clear turbid or bloody fluid

Microscopy:

- solid & papillary labyrinthine (slit like spaces)
- lacelike glandular or cribriform architecture
- Fine, disorderly papillae

Nuclear features: nuclei atypic, pleomorphic

- hyperchromatic nuclei
- Numerous and large, bizarre or multinucleated giant cells
- Secret tubular intraepithelial acini
- Psammoma bodies

Macromas
Two Reed
Ten

~~1/6~~ 7/100