Diseases of ovary

Cystic follicles

- Distention of atretic follicles
  > 2.5 cm = Follicular cysts
- infancy - menopause
- children - precocious puberty
- adults - endometrial hyperplasia
Corpus luteum cyst

- luteinizing cell linings
- bloody contents
- rupture: pain, hemoperitoneum
Polycystic ovary

- multiple cystic follicles
- understood pathogenesis

Stein-Leventhal syndrome
  - amenorrhea
  - infertility
  - endometrial hyperplasia
Ovarian neoplasms

- palpable mass
- pain
- pressure symptoms: GI, urinary
- abnormal uterine bleeding
- incidental findings

Ovarian neoplasms

- Surface epithelium: 70%
- Germ cells: 20%
- Sex cord and stromal cells: 10%
Ovarian neoplasms

Epithelial neoplasms

Embryonic coelomic epithelium
- Mucinous tumors: endocervix
- Serous tumors: tubal epithelium
- Endometrioid / Clear cell carcinoma: endometrium
- Brenner tumor: urothelium
Serous / Mucinous tumors

- Cystadenoma
- Borderline malignancy
- Cystadenocarcinoma

Cystadenomas
Cystadenocarcinomas

Epithelial cell linings
Carcinomas

Mucinous cystadenocarcinoma  Endometroid carcinoma

Germ cell tumors

- 95% mature cystic teratomas
- 8% mixed germ cell tumors

The younger the patient, the more germ cell tumor be malignant
Germ cell tumors

- Dysgerminoma (Seminoma)
- Embryonal carcinoma
- Yolk sac tumor
  (Endodermal sinus tumor)
- Choriocarcinoma

Histogenesis

Primitive germ cells

- Dysgerminoma (Seminoma)
- Totipotential cells
  Embryonal carcinoma

Extraembryonic tissue
  - Yolk sac tumor
  - Choriocarcinoma

Embryonic tissue
  - Mature teratoma
  - Immature teratoma
Teratomas

Mature cystic teratoma (Dermoid cyst)
- malignant change: SCC, adenocarcinoma, carcinoid tumor
Mature solid teratoma (grade 0 immature teratoma)
Monodermal teratoma
Immature teratoma

Mature cystic teratoma
Mature cystic teratoma

Struma ovarii
Fetiform teratoma

Immature teratoma
Malignant germ cell tumor

Stromal sex-cord tumors

- Fibroma
- Thecoma
- Granulosa cell tumor
Fibroma

- solid tumor
- fibroblastic proliferation
- Meigs’ syndrome
  - + ascites
  - + right-sided pleural effusion
Granulosa cell tumor

- 2/3 menopause
- estrogen production
  - precocious puberty
  - endometrial hyperplasia

Call-Exner body
Metastatic tumor

- adenocarcinoma
- stomach, colon, appendix, breast, uterus, lung
- Krukenberg’s tumor
  : bilateral
  : signet ring cells

Krukenberg’s tumor
Men are born to succeed, not to fail.

Henry David Thoreau, 1817-1862, poet and philosopher, American

Thank you