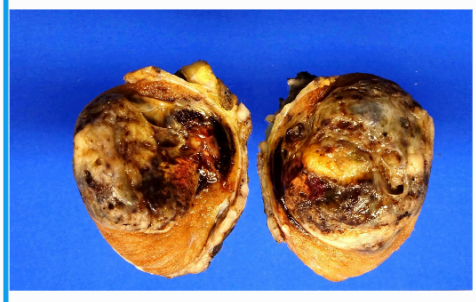
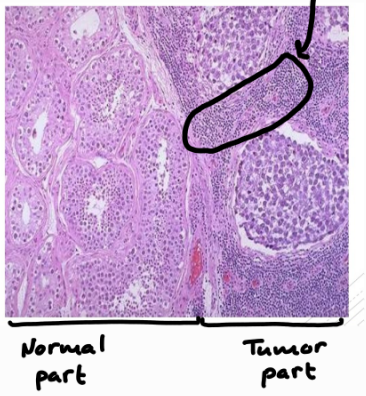
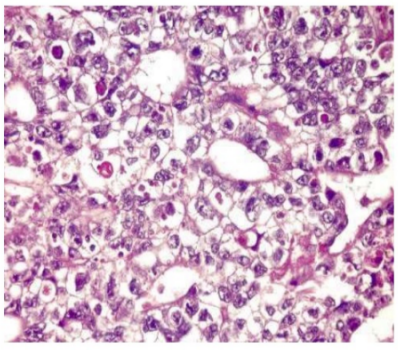
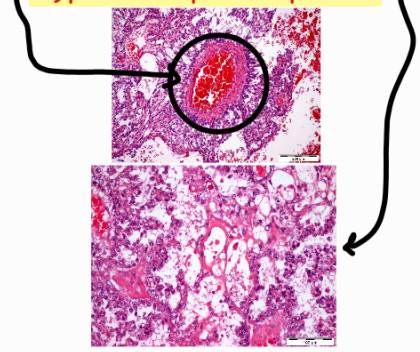
Testicular neoplasms

	1. Seminoma	2. Embryonal carcinoma	3. Yolk sac tumors
General Description	Third decade never in infants Histologically identical tumors called 1. Dysgerminomas, in the ovary, 2. Germinomas 3. CNS & other extragonadal sites Presentation: progressive painless enlargement of the testis	Malignant germ cell tumor (GCT) resembling undifferentiated stem cells during embryonic development. Second most common type of testicular pure GCT Age of presentation (25 – 35) years old, 10 years younger than seminoma. Can occur in Anterior mediastinum and retroperitoneum	The most common primary testicular neoplasm in children younger than 3 years old. In this age group, it has a very good prognosis. In adults most often are seen admixed with embryonal carcinoma (incidence of yolk sac elements is 80% in mixed). Poor prognosis
Morphology	Gross: 1. Soft, well-demarcated gray-white 2. Usually w/o hemorrhage 	Ill-defined, invasive masses containing foci of hemorrhage and necrosis 	Poorly circumscribed, nonencapsulated, predominantly solid. Gray to white to yellow to tan, gelatinous surface 
Microscopic	Large, uniform cells with clear, glycogen-rich cytoplasm, round nuclei, and conspicuous nucleoli. Intervening fibrous septa with dense lymphocytic infiltrate. Granulomatous reaction & syncytiotrophoblasts (15%) Beta estrogen +  	▪ large cells with basophilic cytoplasm, they are undifferentiated & may form primitive glands. ▪ . 	Composed of low cuboidal to columnar epithelial cells that form microcysts, lacelike (reticular) patterns. Presence of structures resembling primitive glomeruli, (Schiller-Duval bodies) Tumors have eosinophilic globules containing a1-anti-trypsin and alpha fetoprotein 

Testicular neoplasms

4. Choriocarcinoma

General Description

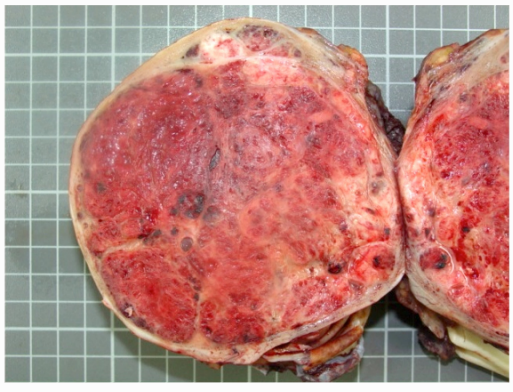
1. Malignant germ cell tumor
2. Composed of syncytiotrophoblast, cytotrophoblast and intermediate trophoblast cells.
3. Beta estrogen +

May present initially with metastases (liver, lung, mediastinum, retroperitoneum) with normal testis or small tumor but with increased serum hCG

Morphology

May be small lesions, even those with extensive systemic metastases

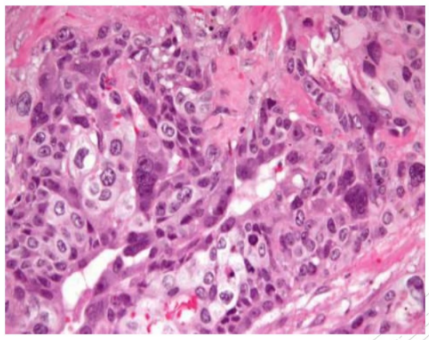
May show total necrosis & extensive hemorrhage



Microscopic

B estrogen ⊕

- histopathology :
  (1)Cytotrophoblast: Sheets of small cuboidal cells, irregularly intermingled with
- (2)Syncytiotrophoblast: large, eosinophilic cells with multiple dark, pleomorphic nuclei.



5. Teratoma

Neoplastic germ cells differentiate along multiple somatic cell lineages.

Pure forms of teratoma are common in infants and children, 2nd in frequency only to yolk sac tumors.

In adults it is seen in combination with other histologic types (mixed), pure forms are rare. poor prognosis

Elements may be:

1. Mature (resembling various tissues within the adult).
2. Immature (sharing features with fetal or embryonal tissues)

In prepubertal males, teratomas are benign.

The majority of teratomas in postpubertal males are malignant .