

Stromal Testis Tumors

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Testicular tumors

- Germ Cell Tumors
- Stromal Tumors
 - ◆ Leydig Cell
 - ◆ Sertoli Cell
 - ◆ Large Cell Calcifying Sertoli Cell Tumor
 - ◆ Juvenile Granulosa Cell
 - ◆ Mixed/Undifferentiated
- Gonadoblastoma

Prepubertal Testis Tumor Registry

- Patients registered primarily between 1980 and 1990
- N=395
 - ◆ younger than 12 years
 - ◆ primary testis tumor

Primary Testis Tumor Types

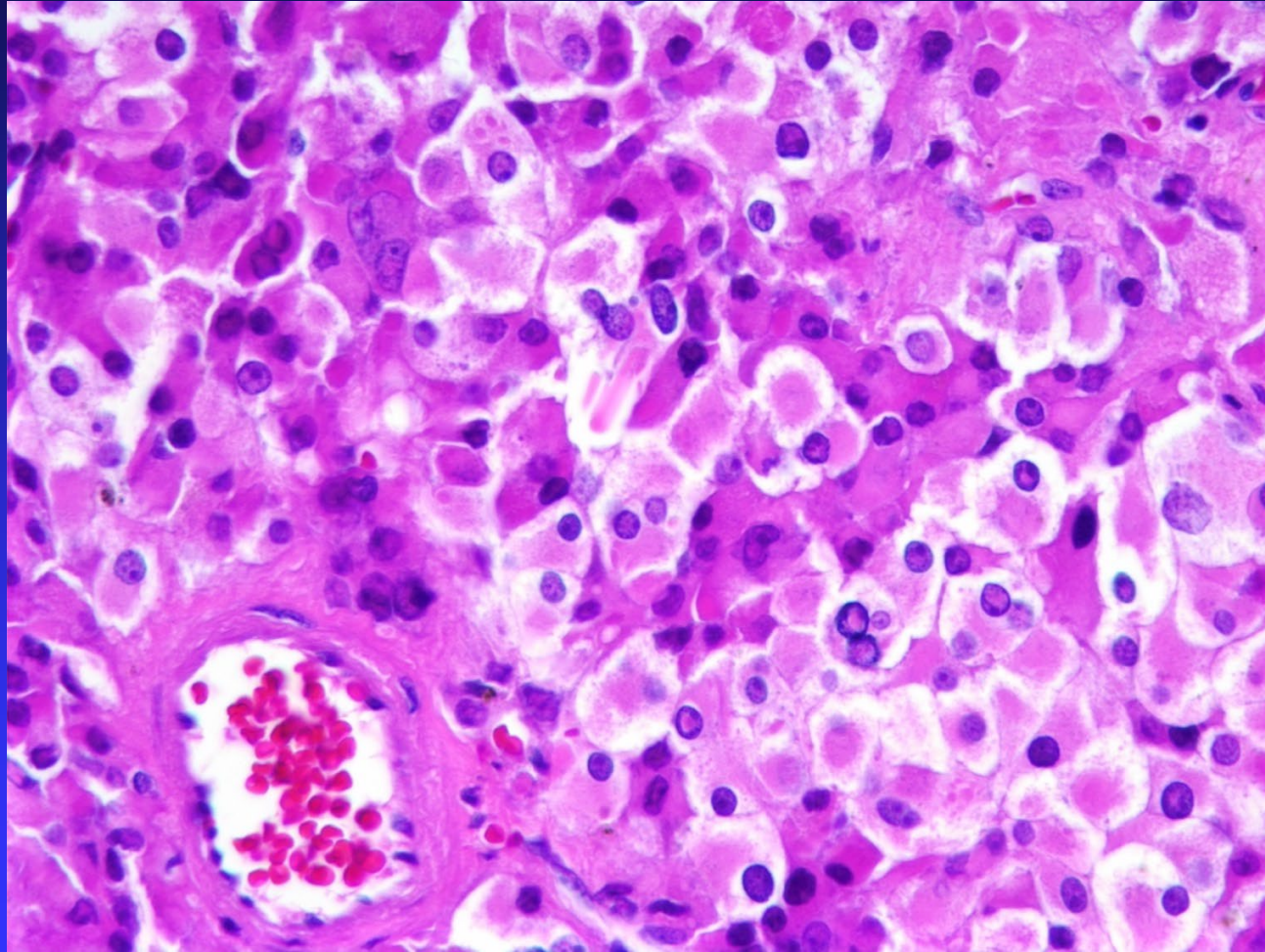
Testis Tumor Registry

Tumor Type	Number	Per Cent
Yolk Sac	244	62
Teratoma	92	23
Epidermoid Cyst	13	3
Stromal	42	11
Gonadoblastoma	4	1

Primary Testis Tumor Types Multicenter Study (n=98)

Tumor Type	Per Cent
Yolk Sac	15
Teratoma	48
Epidermoid Cyst	14
Stromal	13
Other	9

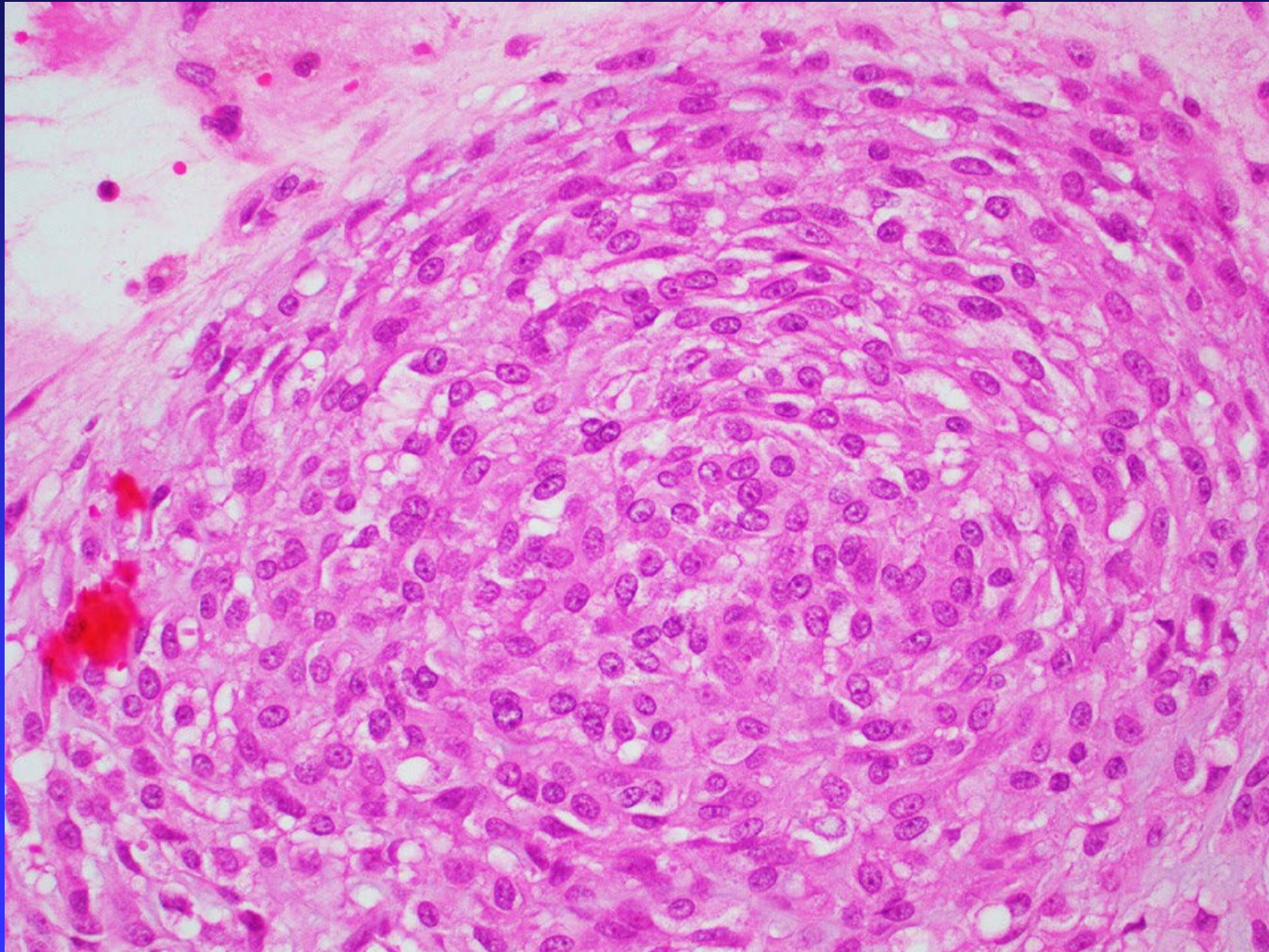
Leydig Cell Tumor



Leydig Cell Tumor

- Universally benign in children
- Precocious puberty (gynecomastia in adults)
- Testis-sparing appropriate (occasionally multifocal)

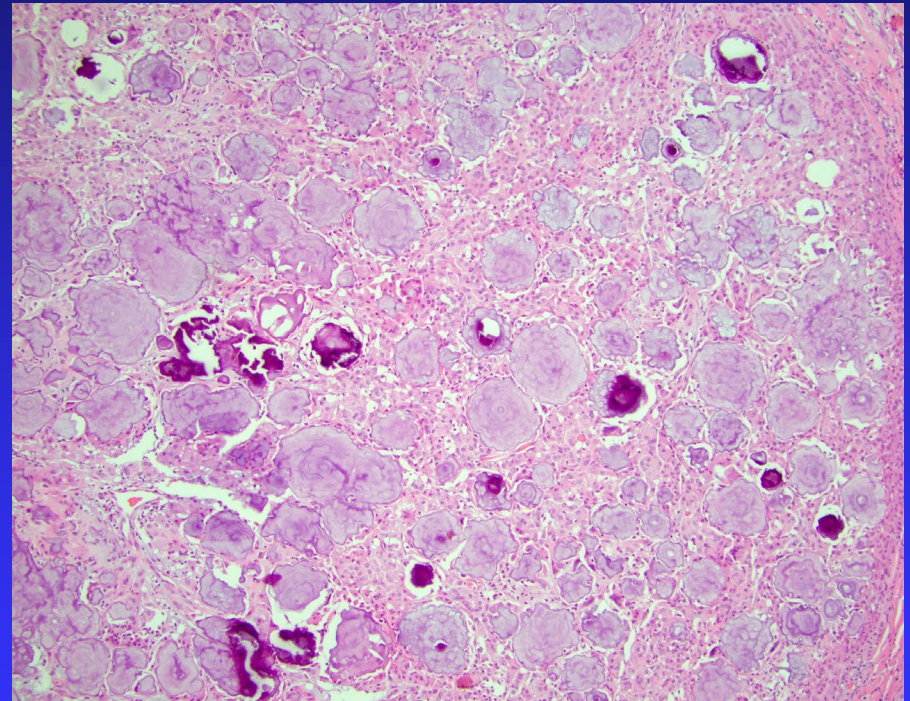
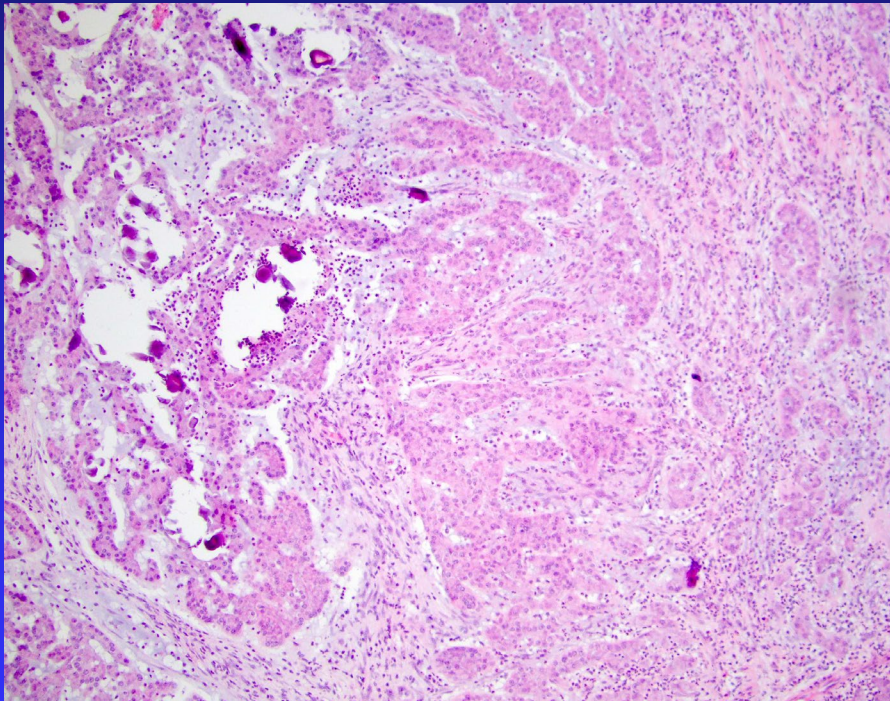
Sertoli Cell Tumor



Sertoli Cell Tumor

- Orchiectomy or testis-sparing surgery
- Malignant in 10% of adult cases
- Malignancy rare in children (and none reported less than 5 years old)
- Usually hormonally inactive in children

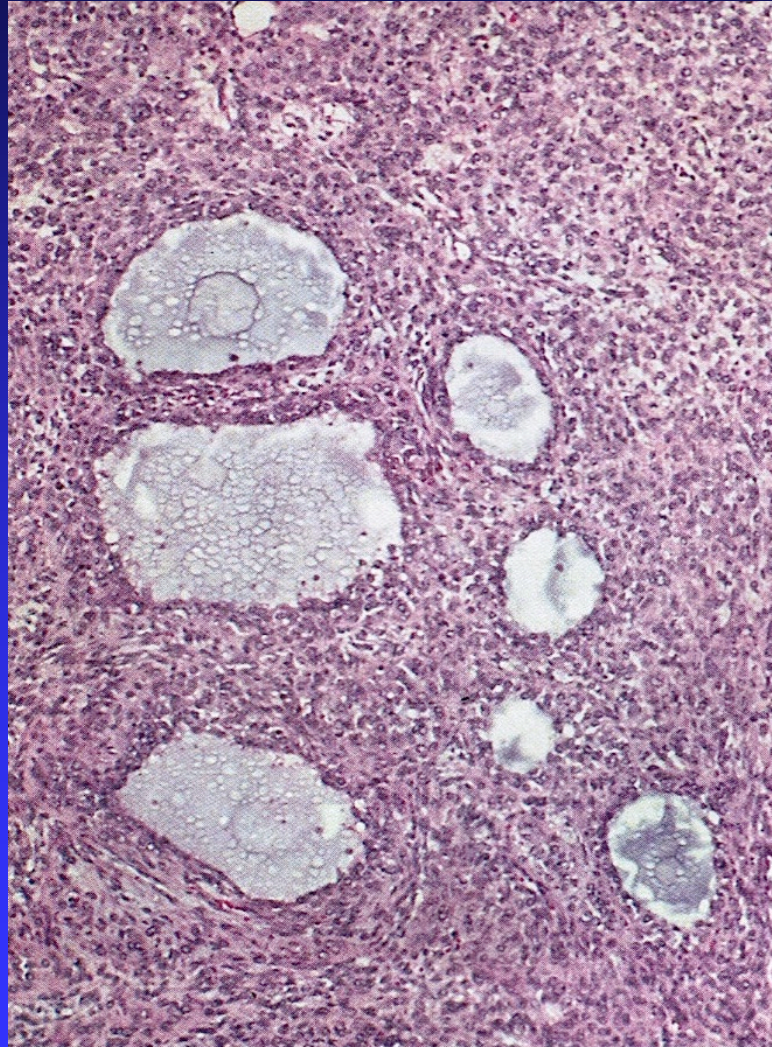
Large cell calcifying Sertoli cell tumor



Large cell calcifying Sertoli cell tumor

- Common in children and adolescents
- Present with mass
- 1/4 bilateral/multifocal
- 1/3 have an associated syndrome
 - ◆ Peutz-Jegher
 - ◆ Carney's
- Universally benign under 25 years old
 - ◆ Testis-sparing reasonable

Juvenile Granulosa Cell Tumor



Juvenile Granulosa cell tumor

- Tumor of infancy
- Universally benign
 - ◆ Testis-sparing surgery
- Y chromosome abnormalities common and ambiguous genitalia has been seen
- Hormonally inactive

Mixed/Undifferentiated stromal tumors

- Malignancy uncommon, but can occur in older children
- Metastatic evaluation/surveillance in older children and those with worrisome histological features

Behavior of Stromal Tumors

- Leydig cell, LCCSCT, and JGCT are benign*
 - ◆ Consider follow-up for 2 years
- Occasional Sertoli > 5 years old and poorly differentiated stromal may be malignant
 - ◆ PEB is recommended treatment

Take-home Points

- Testis-sparing appropriate for most prepubertal patients
- Leydig cell tumor, LCCSCT and JGCT released from oncologic follow-up
- Sertoli cell (over 5 yo) and undifferentiated stromal tumors require metastatic evaluation
- Consider syndromes in large cell calcifying Sertoli cell tumor