DX: Sarcomatoid YST, late recurrence
SALL4

15/22 (68%) cases

7/22 (32%) cases
Clinical Features of SYST (n=22)  
(Howitt et al: AJSP 2015;39:251-9.)

- All in extra-testis sites after chemotherapy
- Age: 27 years (range 18-38 years)
- Locations: RP (64%); intra-abdominal (23%); lung/mediastinum (14%)
- Interval from TGCT: Mean - 71 mo (range 3-132 mo)
- Original TGCT classification (7 cases with data): All with YST and/or highly elevated AFP
- Serum AFP post-chemo and pre-SYST diagnosis: normal except 1 mildly elevated (40 ng/mL)
Clinical Outcome

• Status at last followup after the initial SYST diagnosis:
  – **Alive, NED:** 5 /14 (36%); mean 83 months (range 1 - 259 mo)
  – **DOD:** 8/14 (57%); mean 58 months (range, 7 - 217 mo)
  – **DOC:** 1/14 (7%) at 39 months

• Higher grade portends worse outcome:
  – “High grade” SYST (based on the French sarcoma grading system)
    – 8 /11 (73%) were DOD
    – 1/11 (9%) was DOC
    – 2/11 (18%) were ANED

  3 patients with low grade (grade 1) tumors, all ANED
39-year-old man with left testis pain and ultrasonographic abnormalities.
Dx: Regressed Germ Cell Tumor
Clinical presentation (n=42)
(Balzer & Ulbright: AJSP 2006;30:858-65)
Regressing GCT
Atrophy, ↑LCs
Intratubular granulomas
Distribution of Features in Regressed Testicular GCT

Percentage of features found in regressed germ cell tumors*

- Fibrous Scar
- Lymphoplasmacytic infiltrate
- Ghost seminiferous tubules
- Increased vascularity
- Siderophages
- Intracellular coarse Ca++
- Seminiferous tubule atrophy
- Gonads
- Leydig cell clusters
- Psammomatous microthcts
- Necrosis

Histologic features of regressed germ cell tumors
Features of Regressed GCTs

Diagnostic
• Scar + GCNIS
• Scar + coarse intratubular calcifications

Suspicious
• Scar with hypervascularity, siderophages &/or lymphoplasmacytic infiltrates
• Scar with peripheral seminiferous tubule atrophy, intratubular granulomas, microlithiasis, and/or Leydig cell hyperplasia

N.B. – Tubular “ghosts” in the scar do not R/O a regressed GCT