36M with right testicular swelling and pain

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Epididymitis
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US findings

• Diffuse or focal **hyperemia** in body and tail of epididymis
• **ACUTE**: Enlarged, **HYPOechoic**, heterogeneous due to edema and hemorrhage
• **CHRONIC**: Enlarged, **HYPERechoic**
• Starts within tail → body → testis
  – Orchitis is usually secondary, occurring in 20-40% of epididymitis due to contiguous spread of infection
    • Can cause vascular compromise → ischemia → testicular infarction → sonographic features indistinguishable from testicular torsion
    • Primary orchitis usually caused by mumps and usually bilateral.
• Reactive hydrocele containing low-level internal echoes, septa, thickening of tunical layers ± skin edema; all represent changes of periorchitis
Epididymitis

- Most common cause of acute scrotal pain in adolescent boys and adults (15-35 years)
  - *Neisseria gonorrhoeae* and *Chlamydia trachomatis*
  - Bacterial seeding occurs directly in cases with GU anomaly and presumably hematogenously in cases without demonstrable anomaly
- Clinical presentation: Scrotal swelling, erythema; fever; dysuria.
  - *Prehn sign*: scrotal pain relieved with elevation of testicles over pubis symphysis.
  - Associated lower urinary tract infection and its symptoms, urethral discharge
- Types: Infectious, traumatic, chemical epididymitis (amiodarone)
- Rx: Abx; surgery if abscess forms despite abx
- Complications:
  - Abscess
  - Testicular infarction
  - Gonadal vein thrombosis
  - Pyocele
  - Late testicular atrophy (21%)
  - Recurrent infection may lead to infertility
References

- Statdx
- The Requisites Ultrasound