Epididymo-orchitis

Acute epididymitis is an inflammation of the epididymis. If severe and extends to testicle → epididymo-orchitis. Termed chronic epididymitis if lasts >6mo. Orchitis much less common.

Causes

- Boys: May have assoc urogenital anomalies.
- Men 19-35y:
  - STDs e.g. Chlamydia trachomatis, *Neisseria gonorrhoeae* & *ureaplasma urealyticum*.
- Men >35y:
  - Gram –ve enteric organisms from refluxing UTI, e.g. E. coli, Pseudomonas.
  - Recent instrumentation or catheterisation has occurred.
  - Obstruction: bladder outlet obstruction, (e.g. BPH or urethral stricture)
- Rarer infections (e.g. TB, *H. influenzae*, brucellosis, CMV, Candida)
- Also non-infective epididymo-orchitis: Behcet's disease, amiodarone (doses >200mg daily)
- Viral orchitis from post-pubertal mumps, or rarely Coxsackie A, VZV or Echovirus
- Trauma to the scrotum can be a precipitating event.

Presentation

- Palpable swelling of the epididymis ± testis
- Erythema, oedema and mild scrotal cellulitis & fever may be present.
- Acute epididymitis is usually unilateral but is bilateral in 5-10% of the patients.
- In STD epididymo-orchitis there may be symptoms of a urethritis, e.g. urethral d/c.
- Mumps orchitis: fever, malaise, and myalgia. Parotiditis often precedes the onset of orchitis by 3-5 days. Subclinical infections occur in 30-40% of patients.

Differential diagnosis

Torsion, trauma, abscess formation, testicular tumour, hernia, hydrocoele.

Investigations

Urine: Urethral swab and first void urine: for MC&S, gonorrhoea and chlamydia antigens
Bloods: (Not very useful) FBC, UEC, cultures, serology
Imaging: Ultrasound if Dx unsure or old/young as anatomical anomalies more likely

Management

Supportive: Rest, scrotal elevation and supportive underwear, ice packs, NSAIDs, analgesia
Refer to GUM clinic: for full STD screen, treatment and contact tracing.
Avoid unprotected sex: until Rx and follow up complete
If ?STD: **ceftriaxone** 250mg IM stat + **doxycycline** 100mg bd PO (or **Rulide**) x14d
If ?UTI: **cephalexin** 500mg qid, **Augmentin Duo** bd or **trimethoprim** 300mg od PO x14d
If systemic toxicity: Admit + **ampicillin** 2g IV q6h + **gentamicin** 4-6mg/kg IV od.

Complications

- Scrotal abscess
- Testicular infarction: cord swelling can limit testicular artery blood flow.
- Recurrence or chronic epididymitis
- Sterility is uncommon after acute epididymitis,
- Rarely azoospermia caused by epididymal duct obstruction if not/incompletely treated.