

Introduction

- Epididymo-orchitis = inflammation/infection of the epididymis ± the testis
- In **men <35 it is most commonly caused by STI** pathogens such as *Chlamydia trachomatis* and *Neisseria gonorrhoeae*
- In **men >35 it is most commonly due to gram negative** enteric organisms causing **urinary tract infection**, however there is **considerable overlap between these two**

Note also association with urinary tract instrumentation or surgery; systemic disease; immunosuppression; MSM - insertive anal sex and oral sex.

Diagnosis

- Diagnosis is clinical, with support from the results of investigations undertaken
- Patients usually present with **unilateral testicular pain ± urethral discharge and dysuria**
- The **main differential** diagnosis is **testicular torsion** which is a **surgical emergency** and requires surgery within 6 hours of onset:
 - **Sudden** onset
 - **Severe** pain
 - Occurs more commonly **under age 20**

Tests

- All patients should have **tests for *Chlamydia trachomatis* (first void urine PCR/SDA)** and ***Neisseria gonorrhoeae* (urethral Transwab)**
- Consider dipstick urine and **MSU** in patients in the appropriate age group or if there are any symptoms suggestive of a UTI
- If diagnosis unsure and torsion is suspected, urgent referral for surgical review

Management

STI pathogens suspected:

- Cover infection with ***Neisseria gonorrhoeae* and *Chlamydia trachomatis***
- **Ceftriaxone 500mg im stat AND Doxycycline 100mg bd po for at least 10-14 days**

UTI pathogens suspected:

- Amoxicillin/clavulanate 1 tab tds 14-21 days
- Co-trimoxazole 960mg bd 10 days
- Ciprofloxacin 500mg bd po for 10-14 days

General Management:

- If patient febrile and unwell or may be non-compliant, consider admission for bed rest, analgesia, and IV antibiotics
- Bed rest, scrotal elevation and analgesics are recommended for all patients
- No unprotected intercourse until treatment completed and partner(s) tested and treated and both partners are asymptomatic

Partner notification and management of sexual partners

Partner notification:

- If the patient has epididymo-orchitis due to a **suspected STI**, all **sexual partners from the preceding 2 months** (or most recent contact if over 2 months since last contact) should be tested and treated.

Management of sexual partners:

- Sexual partners should have a sexual health screen performed
- If the STI pathogen causing the epididymo-orchitis is known, an antibiotic regimen appropriate for treating this pathogen should be used
- If the STI pathogen causing the epididymo-orchitis is unknown, treatment should be empirical with a regimen suitable for Chlamydia and Gonorrhoea.
- If sexual partner is positive for *Chlamydia trachomatis* or *Neisseria gonorrhoeae* –partner notification as above

Follow-up

- **Patients should be reviewed in 24- 48 hours** to assess response, and at least once more at 1-2 weeks in order to assess resolution, to give results, check adherence and ensure that sexual partners have been treated
- **If not improving** or condition worsening, consider **surgical referral**
- **If resolution slow consider ultrasound** to exclude complications or co-existing pathology:
 - Testicular infarction or abscess formation
 - Tumour
 - Mumps
 - Tb or fungal infection (esp. if immunocompromised)
- Further investigations - relevant urological investigations if Gram negative organisms, esp. if over 50 years

Epididymo-orchitis

Referral guidelines

Referral to a Specialist Sexual Health Service is recommended for:

- Management of sexual partners if clinician wishes

Referral to urology is recommended:

- Failure to respond to treatment
- Severe epididymo-orchitis requiring iv antibiotics and bed rest
- Urinary tract evaluation if necessary

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