Aotearoa New Zealand STI Management Guidelines for Use in Primary Care

Epididymo-orchitis

Overview

- Epididymitis is inflammation of the epididymis, usually caused by an infection. Epididymo-orchitis involves inflammation of the epididymis and testis

Cause

- *Chlamydia trachomatis* and *Neisseria gonorrhoeae* are the most likely cause of epididymo-orchitis in sexually active people of any age
- Consider enteric pathogens (e.g. *Escherichia coli*) in those older than 35 years, those who have had recent urinary tract instrumentation or surgery, or those who practice insertive anal sex
- Other possible causes of testicular swelling include: tumour, mumps, amiodarone use, Behçet disease (or syndrome), tuberculosis, brucellosis, *Candida* and cryptococcosis, with the latter particularly in those who are immunosuppressed

Clinical presentation

Symptoms	Comments/Considerations

Scrotal pain and swelling	Usually unilateral. Swelling, induration and tenderness of the epididymis is the most common sign. If very acute onset or severe pain consider torsion and urgent surgical referral
Dysuria or urethral discharge	Urethral symptoms are often absent despite the presence of sexually transmitted infections (STIs)
Suprapubic pain, frequency and nocturia	Suggest urinary pathogen rather than STI

Indications for testing

- Scrotal pain and swelling +/- urethral discharge +/- dysuria

Recommended tests

- Diagnosis is clinical, with support from the results of investigations undertaken
- Always consider the possibility of testicular torsion which is a surgical emergency and requires surgery within 6 hours of onset. Immediate urology referral indicated if suspected. Consider if:
    - Sudden onset
    - Severe pain
    - Young age, particularly under 20 years

Investigations

- STI screening as per sexual health check guideline
- Mid-stream urine for microscopy, culture and sensitivities

Management

Treat sexually active people with epididymo-orchitis presumptively for gonorrhoea and chlamydial infection

Treatment options

Infection	Recommended

If most likely due to an STI	Ceftriaxone 500 mg in 2 mL of 1% lignocaine, intramuscular injection, as a single dose PLUS Doxycycline 100 mg orally, twice daily for 14 days
If UTI pathogens suspected	First line: amoxicillin/clavulanate 625 mg (500/125) orally, 3 times daily for 10 days Second line: cotrimoxazole 960 mg orally, twice daily for 10 days Modify treatment as needed, according to mid-stream urine result

- For men who engage in insertive anal sex, treat empirically for STIs as above. If response is poor, alternative treatment may be required to treat enteric organisms
- Modify therapy based on the results of investigations and clinical response. In severe cases, treatment may need to be continued for up to 3 weeks. Seek specialist advice
- Bed rest, scrotal support and analgesia are commonly required. Complete resolution of the swelling may take several weeks, but a substantial response should occur in 4-5 days
- Refer to urology if patient systemically unwell or severe symptoms
- Advise to abstain from sex or use condoms for 2 weeks from the start of treatment, and until partner(s) tested and treated

Partner notification and management of sexual contacts

NB. If urinary tract infection (UTI) pathogen, contact tracing is not required

- If sexual transmission is suspected, contact tracing is important to prevent re-infection and reduce transmission
- All sexual contacts in the last 3 months should be notified
- Most patients choose to tell contacts themselves; giving written information can be helpful
- Notifying all contacts may not be possible e.g. if there is insufficient information or a threat of violence

Management of sexual contacts

- Contacts should have a sexual health check, and empirical treatment with **doxycycline 100 mg orally twice daily for 7 days**, assuming no allergies or contraindications

- Advise contacts to abstain from sex or use condoms until results are available, and treatment completed
- If index case or contacts test positive for an STI, see appropriate STI guideline for management
- Patient-delivered partner therapy is not legal in Aotearoa New Zealand

Follow up

Mild epididymo-orchitis: • Review in **1-2 weeks**, to confirm resolution of signs **Moderate epididymo-orchitis:** • Review in 24-72 hours • Consider urology referral if not improving If resolution slow, consider ultrasound scan to exclude complications or co-existing pathology e.g. testicular tumour Confirmed UTIs in men often require further investigation or urological referral – refer to local guidelines • Discuss test results • Ask if any condomless sex in the week post-treatment • Check medication was completed and tolerated • Ensure notifiable contacts have been informed • Check if any risk of re-infection. Retreatment is necessary if re-exposed to an untreated positive contact
Test of cure • Clinical review as above to ensure signs and symptoms have resolved
Retesting • Re-infection is common • Retesting at **3 months** is recommended, to detect re-infection

Indications for specialist referral

Referral to or discussion with a specialist is recommended for:

- Suspected testicular torsion (surgical emergency)
- Severe epididymo-orchitis
- Poor response to treatment
- Screening and treatment of sexual contacts if clinician wishes
- Allergy or contraindication to standard treatment options

Auditable outcomes

- If STI-related, contact tracing is discussed in 100% of cases

Useful patient resources
Just the facts

Endorsement: These guidelines have been endorsed by the Blood Borne Viruses and Sexually Transmitted Infections Standing Committee (BBVSS).

Developed by: the Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) ABN 48 264 545 457 | CFN 17788

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