Australian STI Management Guidelines for Use in Primary Care

Epididymo-orchitis

Overview

- Epididymo-orchitis is inflammation of the epididymis, and occasionally the testis.

Possible Causes

- The most common cause in people < 35 years is *Chlamydia trachomatis* and occasionally *Neisseria gonorrhoeae.*
- In sexually active people of ANY age, *Chlamydia trachomatis* and *Neisseria gonorrhoeae* remain the most likely cause of epididymo-orchitis. For people who have insertive anal sex, and people who have had recent instrumentation, there is a higher likelihood of enteric pathogens (g. *Escherichia coli* and *Proteus* spp).
- Rarer causes include paramyxovirus (mumps), amiodarone use, tuberculosis, brucellosis, *Candida* spp, cryptococcosis, and Behçet syndrome.
- *Mycoplasma genitalium* may be a cause although the evidence is limited.
- Non-STI causes for epididymo-orchitis are possible in the presence of a urinary tract infection or prostatitis.

Clinical presentation

Symptoms	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) (if present the patient would have sought treatment earlier).
Suprapubic pain, frequency and nocturia	Suggests urinary pathogen rather than STI.

Diagnosis

Infection	Site/Specimen	Test
Chlamydia	First pass urine	NAAT
Gonorrhoea	First pass urine Urethral swab of urethral discharge (if present)	NAAT. If NAAT test result is positive, take swab at relevant site(s) for culture, before treatment Microscopy, culture and sensitivities
Urinary pathogens	Mid-stream urine	Microscopy, culture and sensitivities

NAAT – Nucleic acid amplification test

Specimen collection guidance

Clinician collected | Self-collection

Investigations

- Physical examination to determine exact site and nature of swelling and tenderness
- If present, collect sample of urethral discharge for microscopy, culture and sensitivity (MC&S)
- Collect first pass urine and mid stream urine specimens
- If diagnosis uncertain, Doppler ultrasonography may help exclude testicular infarction, torsion or tumour.

Special considerations

- If diagnosis remains uncertain and pain is severe, refer for urgent surgical assessment. Torsion can result in the loss of the testis within hours. In these cases, it is usually best to refer without ultrasound to avoid delay.

Management

Treat sexually active men with epididymo-orchitis presumptively for gonorrhoea and chlamydia.

Principal treatment options		
Infection	**Recommended**	
Chlamydia or gonorrhoea suspected	Ceftriaxone 500mg in 2 mL of 1% lignocaine IMI, stat PLUS EITHER Doxycycline 100mg PO, BD for 14 days OR Azithromycin 1g PO, stat and repeated 1 week later.	

Treatment advice

- For men who engage in insertive anal sex, treat empirically as above, however if response is poor, alternative treatment may be required to treat enteric organisms. Seek specialist advice.
- 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.

Other immediate management

- Advise no sexual contact for **7 days** after treatment is commenced, or until the course is completed and symptoms resolved, whichever is later.
- Advise no sex with partners from the last **6 months** until the partners have been tested and treated if necessary.
- Comprehensive STI testing may be appropriate, depending on the patient's sexual history.
- Contact tracing.
- Provide patient with factsheet.

Contact Tracing

- If STI-related, all sexual partners from the past **6 months** should be tested and treated

- If urinary tract infection, contact tracing is not required

See Australasian Contact Tracing Manual – Epididymitis for more information.

Follow Up

Follow-up at **4-5 days** provides an opportunity to:

- Assess treatment response and reassess in light of the test results, including antibiotic sensitivities
- If STI-related, confirm that sexual partners have been properly managed. Offer more contact tracing support if needed
- Provide further sexual health education and prevention counselling
- Men with chlamydia and gonorrhoea should be retested for re-infection after **3 months**
- Confirmed urinary tract infections in men often require further investigation or urological referral.

Consider testing for other STIs, if not undertaken at first presentation, or retesting post the window period.

Test of cure is not recommended.

Auditable Outcomes

- If STI-related, 100% of regular partners are tested and treated.

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

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Funded by: The Australian Government Department of Health