Epididymo-orchitis

MANAGEMENT SUMMARY

EXCLUDE TORSION

Take history – age, sexual history, previous catheterisation or urinary tract infection (UTI)?
Examination – swollen scrotum, tender epididymis/testicle, urethral discharge?
Tests – urethral culture swab for gonorrhoea (if gonorrhoea culture available) if urethral discharge, plus in all cases first void urine for chlamydia & gonorrhoea NAAT testing (first 30ml), preferably ≥1 hour after last void, and mid-stream urine for urine dipstick and culture for urinary pathogens

STI-associated epididymo-orchitis more likely if

- **< 35 years**
- > 1 sexual contact in past 12 months
- Urethral discharge
- Men who have sex with men (MSM)

Urinary pathogen-associated epididymo-orchitis more likely if

- > 35 years
- Low risk sexual history
- Previous urological procedure or UTI
- No urethral discharge
- Positive urine dipstick for leucocytes + nitrites

Management of epididymo-orchitis likely due to any STI

- Ceftriaxone 500mg im stat (make up with 2ml lignocaine 1% or as per data sheet) *plus* doxycycline 100mg po twice daily for 14 days
- Advise to abstain from sex or use condoms for for 2 weeks after the start of treatment and until 1 week after all sexual contact/s have been treated
- Bed rest, scrotal support, analgesia

Management of epididymo-orchitis likely due to enteric or urinary organisms

- Ciprofloxacin 500mg po bd 10 days (specialist approval may be required)
- Bed rest, scrotal support, analgesia

Follow-up

- Symptoms should be improving after 3 days
- Arrange further review at 1 week
- Check laboratory results

Symptoms and signs resolved/significantly improved

- Check compliance with treatment
- Check sexual abstinence
- Ensure partner notification/contact tracing complete

Discharge once symptoms and signs fully resolved
Offer repeat sexual health check in 3 months

MSU positive

- Consider renal tract ultra-sound scan (USS)
- Referral to urology

Symptoms and signs persist

- Check compliance with treatment
- Check no unprotected sex
- Ensure partner notification complete
- Review diagnosis
- Consider alternative aetiologies
- Consider testicular USS
- Consider urology referral

Partner notification and management of sexual contacts

If STI cause suspected:

- Be clear about language: 'partner' implies relationship
- All sexual contacts in the last 3 months should be notified
- Contact/s should have a sexual health check and treatment as an epididymitis contact, with azithromycin 1g po stat, without waiting for test results
  - If gonorrhoea suspected in index case, add ceftriaxone 500mg im stat
- If contacts test positive for an STI refer to specific guideline www.nzshs.org/guidelines
- Advise contacts to abstain from sex or use condoms for 1 week from the start of treatment and until results of tests are available
- Most choose to tell contacts themselves; giving written information is helpful
- Notifying all contacts may not be possible, e.g. if there is insufficient information or a threat of violence

The Ministry of Health supports the use of these clinical guidelines, developed by clinical experts and professional associations to guide clinical care.
Further guideline information – www.nzshs.org/guidelines or phone a sexual health specialist.
This STI Management Guideline Summary has been produced by NZSHS. Every effort has been taken to ensure that the information in this guideline is correct at the time of publishing (September 2017).

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Epididymo-orchitis

MANAGEMENT GUIDELINES

Introduction

- Epididymo-orchitis = inflammation/infection of the epididymis ± the testis.
- In sexually active men of ANY age, *Chlamydia trachomatis* and *Neisseria gonorrhoeae* remain the most likely cause of epididymo-orchitis.
- In men >35 years, men who have had recent urinary tract instrumentation or surgery, or those who practice insertive anal sex, enteric pathogens (e.g. *Escherichia coli*) should be considered.

Note: Other possible causes of testicular swelling include: tumour, mumps, amiodorone use, Behcet's syndrome, tuberculosis, brucellosis, Candida spp. and cryptococcosis, with the latter particularly in immunosuppressed.

Diagnosis

- Diagnosis is clinical, with support from the results of investigations undertaken.
- Patients usually present with unilateral scrotal pain and swelling ± urethral discharge and/or dysuria.
- Suprapubic pain, frequency and nocturia are more suggestive of a urinary pathogen.
- The main differential diagnosis is testicular torsion which is a surgical emergency and requires surgery within 6 hours of onset. Consider if:
  - Sudden onset
  - Severe pain
  - Young age, particularly under 20 years.

Diagnostic Tests

- Patient should ideally not have passed urine for at least 1 hour prior to specimen collection.
- Specific tests for gonorrhoea & chlamydia (see Sexual Health Check guideline **www.nzshs.org/guidelines**).
- Urine dipstick and MSU.
- If mumps is considered likely, then mumps IgG and IgM serology and PCR on oropharyngeal swab (if available).

Note: If diagnosis unsure and torsion is suspected, immediate urological review is required.

Management

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

Treatment regimens

If most likely due to an STI:

- Cover for infection with gonorrhoea and chlamydia.
- Ceftriaxone 500mg im stat (make up with 2ml lignocaine 1% or as per data sheet) plus doxycycline 100mg po twice daily for 14 days.

If UTI pathogens suspected:

- Ciprofloxacin 500mg po twice daily for 10 days (specialist approval may be required).
- Alternative in cases of allergy, tendon injury, etc:
  - Amoxicillin/clavulanate 625mg (500/125) po 3 times daily for 10 days or Trimethoprim 300mg po daily for 10 days.

Other management

- Vital signs
- Bed rest, scrotal support and analgesics are recommended for all patients.
- Complete resolution of the swelling may take several weeks, but a response should occur in 4–5 days. If patient febrile and unwell or may be non-compliant, consider admission for bed rest, analgesia, and iv antibiotics.
- Advise to abstain from sex or use condoms until 2 weeks from the start of treatment and until 1 week after sexual contact/s have been treated.
- Provide the patient with a fact sheet.
- Partner notification.

Partner Notification and Management of Sexual Contacts

Partner notification – if due to suspected STI

- Be clear about language: 'partner' implies relationship.
- All sexual contact/s in the last 3 months should be notified.
- Contact/s should have a sexual health check and treatment as a contact of epididymo-orchitis with azithromycin 1g po stat without waiting for test results.
  - If gonorrhoea suspected in index case, add ceftriaxone 500mg im stat.
- If contacts test positive for an STI refer to specific guideline **www.nzshs.org/guidelines**.
- Advise contacts to abstain from sex or use condoms for 1 week from the start of treatment and until results of tests are available.
- Most choose to tell contacts themselves, giving written information is helpful.
- Notifying all contacts may not be possible, e.g. if there is insufficient information or a threat of violence.

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 contacts have been notified.
- If not improving or condition worsening, consider specialist referral.
- If resolution slow, consider ultrasound to exclude complications or co-existing pathology.
- Further investigations – relevant urological investigations if gram negative organisms, especially if over 50 years.
- All patients should be asked to re-attend for a sexual health check in 3 months (test of re-infection).
- Re-treatment is required if there has been any unprotected sex with untreated sexual contacts during the follow-up interval.

Referral Guidelines

Referral to or discussion with a sexual health specialist is recommended for:

- Screening and treatment of sexual contacts if clinician wishes.
- Allergy to standard treatment options.
- Failure to respond to treatment or low grade bilateral or atypical symptoms.

Referral to or discussion with urology is recommended for:

- Suspected torsion (immediate referral).
- Severe epididymo-orchitis requiring iv antibiotics and bed rest.
- Urinary tract evaluation required.