

BCCDC Non-certified Practice Decision Support Tool
Epididymitis

EPIDIDYMITIS

DEFINITION

Epididymitis is an inflammation of the epididymis with a relatively acute onset of unilateral testicular pain and swelling often with tenderness of the epididymis, vas deferens and occasionally with erythema and edema of the overlying skin.

POTENTIAL CAUSES

Bacterial

- *Neisseria gonorrhoeae* (GC)
- *Chlamydia trachomatis* (CT)
- coliforms
- *Pseudomonas aeruginosa*
- *Mycobacterium tuberculosis*

PREDISPOSING RISK FACTORS

- sexual contact in which exchange of body fluid may occur
- history of urethritis or other sexually transmitted infection (STI)

TYPICAL FINDINGS

Sexual Health History

- sexual contact
- sexual contact(s) diagnosed with an STI in past 60 days

Physical Assessment

- urethral discharge
- urethral itching
- dysuria
- tenderness to palpation on the affected side
- testicular or scrotal pain and swelling
- palpable swelling of the epididymis
- erythema and/or edema of the scrotum on the affected side
- fever

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Differential Diagnosis:

It is essential to rule out testicular torsion or trauma during the physical assessment. Testicular torsion requires immediate medical intervention.

Males under the age of 20 are more likely to present with testicular swelling due to testicular torsion. Studies demonstrate that approximately 75 to 85% of males under the age of 18 presenting with acute onset of testicular swelling have a testicular torsion rather than epididymitis (Holmes et al, 2008; PHABC, 2006).

Diagnostic Tests:

urethral swab for smear and gonorrhea (GC) culture – If urethral discharge present, can collect discharge from urethral opening without inserting swab into urethra.

AND

midstream urine for microscopy & culture

AND

urine specimen for NAAT (CT & GC): first 10-20 ml preferably after client has not voided in previous 2 hours. May be collected as the only diagnostic test when:

- C&S is unavailable
- Urethral smear is unavailable
- Client is unable to tolerate urethral swab

urethral swab for NAAT CT/GC may be used if urine NAAT CT/GC testing is unavailable

AND

if immediately available, in conjunction with physician/NP referral, doppler ultra sound may be ordered to help differentiate epididymitis from testicular torsion

In addition to the diagnostic tests above, offer clients presenting with epididymitis routine STI and HIV screening.

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CLINICAL EVALUATION

Certified practice RNs must refer to a physician or nurse practitioner (NP) all clients who present with suspected epididymitis.

MANAGEMENT AND INTERVENTIONS

Goals of Treatment:

- treat infection
- alleviate symptoms
- prevent complications
- prevent spread of infection

TREATMENT OF CHOICE – USE ONLY IN CONSULT WITH PHYSICIAN OR NP

Men who have sex with men (MSM)	Non-MSM	Notes
<p><u>First Choice</u></p> <p>ceftriaxone 250 mg IM and doxycycline 100mg PO BID for 10 days</p> <p>OR</p> <p>cefixime 800 mg PO in a single dose and doxycycline 100 mg PO BID for 10 days</p>	<p><u>First Choice</u></p> <p>cefixime 800 mg PO in a single dose and doxycycline 100 mg PO BID for 10 days</p> <p>OR</p> <p>ceftriaxone 250 mg IM and doxycycline 100 mg PO BID for 10 days</p>	<ol style="list-style-type: none"> 1. Treatment for epididymitis covers for both gonorrhea and Chlamydia. 2. DO NOT USE ceftriaxone or cefixime if history of allergy to cephalosporins or a history of anaphylaxis or immediate reaction to penicillin. 3. DO NOT USE azithromycin if history of allergy to macrolides. 4. DO NOT USE doxycycline if allergic to tetracycline 5. DO NOT USE lidocaine if history of allergy to lidocaine or other local anaesthetics. Use cefixime PO as alternate treatment. 6. The preferred diluent for ceftriaxone IM is 0.9 mls lidocaine 1% (without epinephrine) to minimize discomfort. 7. For intramuscular injections (IM) of ceftriaxone or spectinomycin, the ventrogluteal site is preferred 8. Use of doxycycline as the first choice is preferable in the treatment of epididymitis due to its increased effectiveness for the co-treatment of Chlamydia. 9. Advise client to remain in the clinic for at least 15 minutes post IM injection in case of anaphylactic reaction to treatment. Provide anaphylaxis treatment as required, using BCCDC Immunization Manual- Section V- Management of Anaphylaxis in a Non-Hospital Setting. BCCDC, Feb 2009, available at: http://www.bccdc.ca/NR/rdonlyres/52EA275F-0791-4164-ABA9-07F0183FF103/0/SectionV_Anaphylaxis_Jan05.pdf 10. If serious allergic reaction develops including difficulty breathing, severe itchiness, have the client inform clinic staff immediately. If symptoms develop after leaving the clinic, advise the client to seek immediate emergency care. 11. Advise client about the potential for the side effects of pain, redness and swelling at the injection site or diarrhea. If any of these effects persist or worsen advise to contact health care provider 12. See BCCDC Client and Medication Information Sheets for further medication reconciliation and client information. Available at http://www.stiresource.com/brochures/indexbrochures.php

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<p><i>continued from previous page</i></p> <p><u>Second Choice</u></p> <p>ceftriaxone 250 mg IM and azithromycin 1 gm PO in a single dose repeated in 1 week (2 doses of 1 gm PO each given 7 days apart)</p> <p>OR</p> <p>cefixime 800 mg PO in a single dose and azithromycin 1 gm PO in a single dose repeated in 1 week (2 doses of 1 gm PO each given 7 days apart)</p>	<p><i>continued from previous page</i></p> <p><u>Second Choice</u></p> <p>cefixime 800 mg PO in a single dose and azithromycin 1 gm PO in a single dose repeated in 1 week (2 doses of 1 gm PO each given 7 days apart)</p> <p>OR</p> <p>ceftriaxone 250 mg IM and azithromycin 1 gm PO in a single dose repeated in 1 week (2 doses of 1 gm PO each given 7 days apart)</p>	<p>13. Ofloxacin is recommended if probable causative organisms are enteric</p> <p>14. Ceftriaxone and cefixime are recommended if probable causative organisms are gonorrhea and/or chlamydia</p>
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PARTNER COUNSELLING AND REFERRAL

Counsel clients to notify sexual contacts within the previous 60 days that they require testing and treatment to cover chlamydia and gonorrhea. See Treatment of STI Contacts DST.

Unless the client tests positive for a reportable sexually transmitted infection (i.e., chlamydia, gonorrhea), the client completes partner notification.

MONITORING AND FOLLOW UP

1. Arrange for client appointment for reassessment 2-4 days after the onset of treatment and again when treatment is completed for repeat exam to ensure that pain and swelling is resolving.
2. Advise clients to seek urgent medical care if symptoms worsen
3. Refer to physician or NP for reassessment if symptoms are unresolved
4. If test results positive for gonorrhea or chlamydia, refer to appropriate DST for follow-up.

POTENTIAL COMPLICATIONS

- infertility, especially if bilateral involvement
- formation of an abscess
- inflammation of the testicle

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CLIENT EDUCATION /DISCHARGE INFORMATION

Counsel client:

- regarding the appropriate use of medications (dosage, side effects, and need for re-treatment if dosage not completed)
- to avoid sexual contact until client and partners have completed screening and treatment
- to inform all sexual contacts within the last 60 days (or the last sexual contact) that they require testing and treatment
- regarding harm reduction measures (condom use)
- regarding the complications from untreated epididymitis
- regarding the co infection risk for HIV when another STI is present
- regarding the asymptomatic nature of STI and HIV

CONSULTATION AND/OR REFERRAL

Refer all clients suspected of having epididymitis to a physician or nurse practitioner.

Refer all clients who are pregnant or breastfeeding.

DOCUMENTATION

- epididymitis is not reportable
- documentation as per agency guidelines

REFERENCES

BCCDC (2007) British Columbia Treatment Guidelines. Sexually Transmitted Infections in Adolescent and Adults. STI/HIV Prevention and Control Division, BC Centre for Disease Control.

Holmes, K., Sparling, P., Stamm, W., Piot, P., Wasserheit, J., Corey, L., Cohen, M., Watts, H. (2008). *Sexually transmitted disease (4th ed)*. Toronto, ON: McGraw Hill Medical.

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