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 noted of the overlying skin.

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

POTENTIAL CAUSES

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

PREDISPOSING RISK FACTORS

- sexual contact
- history of urethritis or other sexually transmitted infection (STI)

TYPICAL FINDINGS

Sexual Health History
- sexual contact
- recent STI
- sexual contact(s) diagnosed with an STI
Physical Assessment

- urethral discharge
- urethral itching
- dysuria
- pain/tenderness on palpation of 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

Special Considerations:

It is essential to rule out testicular torsion during the physical assessment as this requires immediate medical intervention. Males under the age of 20 are more likely to present with testicular swelling due to testicular torsion. Careful attention to potential testicular torsion is required during the physical assessment for testicular pain. 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.

Diagnostic Tests:

- urethral swab for:
  - GC culture and sensitivity (C&S)
  - and
  - smear for typical intracellular diploccoci (TID) and polymorphonuclear leukocytes (PMNs) (if available)

Note: If urethral discharge present, the nurse can collect discharge from the urethral opening without fully inserting swab into urethra.
AND

- urine specimen for nucleic acid amplification test (NAAT) (CT & GC): collect first 10-20 ml preferably after the client has not voided in the previous 1-2 hours. (Use a urethral swab for NAAT CT/GC only if urine NAAT CT/GC testing is unavailable). Urine for NAAT CT/GC may be collected as the only diagnostic test when:
  
  - swab for GC C&S is unavailable
  - smear for TID and PMN is unavailable
  - Client is unable to tolerate a urethral swab

AND

- if immediately available, in conjunction with a physician or NP referral, doppler ultrasound may be ordered to help differentiate epididymitis from testicular torsion

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

**CLINICAL EVALUATION**

*Immediately refer all clients who present with suspected epididymitis to a physician or NP.*

**MANAGEMENT AND INTERVENTIONS**

**Goals of Treatment:**

- treat infection
- alleviate symptoms
- prevent complications
- prevent spread of infection
## TREATMENT OF CHOICE – USE ONLY IN CONSULTATION WITH A PHYSICIAN OR NP

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Choice</strong></td>
<td></td>
</tr>
</tbody>
</table>
| cefixime 800 mg PO in a single dose and doxycycline 100 mg PO bid for 10 days | 1. Treatment for epididymitis covers for potential of gonorrhea and Chlamydia infection.  
2. **DO NOT USE** ceftriaxone or cefixime if history of allergy to cephalosporin or a history of anaphylaxis or immediate reaction to penicillin.  
3. **DO NOT USE** doxycycline if allergic to tetracycline  
4. **DO NOT USE** lidocaine if history of allergy to lidocaine or other local anaesthetics. Use cefixime PO as alternate treatment.  
5. The preferred diluent for ceftriaxone IM is 0.9 ml lidocaine 1% (without epinephrine) to minimize discomfort.  
6. For intramuscular injections (IM) of ceftriaxone the ventrogluteal site is preferred. (See [http://www.bccdc.ca/imm-vac/ForHealthProfessionals/ImmsCompetency.htm](http://www.bccdc.ca/imm-vac/ForHealthProfessionals/ImmsCompetency.htm))  
7. 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.  
8. If the client has missed 2 consecutive doses of doxycycline within the first 5 days of treatment, or has not completed a full five day course of treatment, then retreatment is indicated.  

OR

| | |
| ceftriaxone 250 mg IM in a single dose and doxycycline 100 mg PO bid for 10 days | |

Continued on next page....
9. Advise the 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 the BCCDC Immunization Manual - Section V - Management of Anaphylaxis in a Non-Hospital Setting. If serious allergic reaction develops including difficulty breathing or severe itchiness, have the client inform clinic staff immediately. If symptoms develop after leaving the clinic, advise the client to seek immediate emergency care.

10. Advise the client about the potential for side effects of pain, redness and swelling at the injection site or diarrhea. If any of these effects persist or worsen advise, to contact a health care provider

11. See BCCDC Client and Medication Information Sheets for further medication reconciliation and client information. Available at http://smartsexresource.com/health-providers/resources/categories/Medication%20handouts.

12. Ofloxacin is recommended if probable causative organisms are enteric.

13. The Canadian STI Treatment Guidelines (December, 2011) recommend ceftriaxone for the treatment of gonococcal infection in MSM and for all pharyngeal infection as a first choice; however local BC data do not currently indicate this preference is necessary.

14. Future GC Treatment regimens will continue to reflect national recommendations in association with local GC antimicrobial resistance trends (AMR) trends. For more information on GC AMR trends in BC refer to the BC Public Health Microbiology & Reference Laboratory: 2013.
PARTNER COUNSELLING AND REFERRAL

Counsel clients to notify all sexual contacts within the previous 60 days (or last sexual contact) that they require testing and treatment to cover Chlamydia and gonorrhea.

See the CRNBC Treatment of STI Contacts DST. Unless the client tests positive for a reportable STI (i.e., Chlamydia, gonorrhea), the client completes partner notification.

MONITORING AND FOLLOW-UP

- recommend the client return for re-assessment or seek medical care if symptoms have not resolved by 3-7 days after the onset of treatment
- advise the client to seek urgent medical care if symptoms worsen
- refer to a physician or NP at reassessment if the client’s symptoms are unresolved
- if test results are positive for gonorrhea and/or Chlamydia, refer to appropriate DST for follow-up.

POTENTIAL COMPLICATIONS

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

CLIENT EDUCATION

Counsel client:

- to return for re-assessment or seek medical care if symptoms have not resolved by 3-7 days after starting treatment
- to seek urgent medical care if symptoms worsen
- regarding the appropriate use of medications (dosage, side effects, and need for re-treatment if dosage not completed)
- to inform all sexual contacts within the last 60 days (or the last sexual contact if no contacts in previous 60 days) that they require testing and treatment
- to avoid sexual contact until the client and their partner(s) have completed screening 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 OR REFERRAL

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

DOCUMENTATION

- epididymitis is not reportable
- partner notification is required (e.g. completion of H208 form) if lab reportable infections are confirmed from the diagnostic tests
- documentation as per agency guidelines
REFERENCES


