URETHRITIS IN MALES

I. DEFINITION:

Inflammation of the urethra is caused by an infection characterized by a mucopurulent or purulent material and by burning sensation during urination. The prevalence differs by age group with older males having a lower prevalence.

II. CLINICAL FEATURES: Urethral discharge is considered abnormal so clients with urethral discharge or reporting urethral discharge should be treated presumptively.

A. Subjective

1. Slight discharge – often noticed only in the morning.
2. Crusting on the meatus or staining on underwear.
3. Dysuria.
4. Urethral itching.
5. Frequency, hesitancy, hematuria, and urgency are not commonly associated with urethritis.
6. Unilateral Testicular pain and swelling.

B. Objective

1. Mucoid to purulent discharge (mucoid discharge is more common in nongonococcal urethritis; purulent discharge is suggestive of gonococcal urethritis).
2. Unilateral Testicular pain/tenderness, and palpable testicular swelling. Inguinal lymphadenopathy is uncommon (suggestive of herpes simplex virus or LGV infection).

III. MANAGEMENT PLAN:

A. Perform a physical exam to determine presence of mucoid discharge or testicular pain and swelling.

B. Laboratory Studies – collect specimens for appropriate testing:

1. Males: Collect urine for C. trachomatis and N. gonorrhoeae. Ensure client waits 1 hour after last voiding to give sample.
2. Blood test for HIV and Syphilis are recommended.

C. Criteria to Treat:

1. Mucopurulent or purulent urethral exudate visible on exam.
2. Acute Epididymitis- Testicular pain/tenderness and swelling.
D. Treatment:

**Option #1**  Ceftriaxone\(^2\) 250 mg IM in a single dose  
Given with  
Azithromycin 1 G orally in a single dose

**Option #2**  When client reports allergy to azithromycin: erythromycin or any macrolide antibiotic (see treatment note 7)  
Ceftriaxone\(^2\) 250 mg IM in a single dose  
Given with  
Doxycycline 100mg orally twice a day for 7 days

**Option #3**  For signs and symptoms of acute epididymitis  
Ceftriaxone\(^2\) 250 mg IM in a single dose  
Given with  
Doxycycline 100mg orally twice a day for 10 days

**Option #4**  When Client reports true hypersensitivity to cephalosporins, ceftriaxone, or penicillin: (see treatment notes 4 & 5)  
Gentamicin 240 mg IM in a single dose (see treatment note #4)  
Given with  
Azithromycin 2 G orally in a single dose

Treatment Notes:

1. \(^1\)Ceftriaxone:  
   Must be given with 1% lidocaine solution as a diluent to lessen injection pain unless the client reports hypersensitivity or allergic reaction to local anesthetic agents or severe liver disease. See package insert for amounts and a complete discussion of lidocaine.

2. **Dual therapy is the recommended treatment.** Ceftriaxone must be administered with either azithromycin or doxycycline. Ceftriaxone works by keeping bacteria from making and maintaining their cell walls while azithromycin and doxycycline prevent protein production and replication. **They must be administered at the same time to achieve the desired effect.** The use of azithromycin as the second antimicrobial is preferred to doxycycline because of the convenience and compliance advantages of single-dose therapy.

3. To maximize adherence for multi-dose regimens, the first dose should be dispensed on site and directly observed.

4. Clients with an unknown reaction to PCN that occurred >10 years ago can safely be given ceftriaxone. Less than 1% will have allergic reactions and those are extremely unlikely to be anaphylactic reactions.
   
   Ceftriaxone is safe for clients with ampicillin or amoxicillin specific allergies due to these medications not sharing the same side chains ceftriaxone.

5. Ceftriaxone is contraindicaded in clients who report true IgE mediated reaction to PCN or cephalosporins. Characteristics of IgE mediated reaction include:
a. **Reactions that occur immediately or usually within one hour after taking medication.** True hypersensitivity reactions include: generalized flushing of the skin, urticaria, rash (hives) anywhere on the body; angioedema, swelling of face, throat or mouth, bronchospasm, and shortness of breath, sensation of throat closure or intense throat itch, nausea and vomiting; alterations in heart rate, cardiovascular collapse, hypotension, vasodilatation sudden feeling of weakness, sense of impending doom, collapse and unconsciousness

b. Anaphylaxis- Requires signs and symptoms in at least two of the following body systems: skin, respiratory, cardiovascular, gastrointestinal.

c. Stevens- Johnson Syndrome

d. Toxic epidermal necrolysis

6. Clients with (+GC, Urethritis, or contact) with well-documented hypersensitivity to PCN, (including documentation of patient stated adverse effects of penicillin, cephalosporins, or ceftriaxone) are to be referred to their private physician or healthcare provider for evaluation and treatment.

7. Azithromycin is contraindicated in clients with known hypersensitivity to azithromycin, erythromycin, or any macrolide antibiotic such as clarithromycin (Biaxin).

8. **Gentamicin: Review and discuss client medication handout sheet prior to providing Gentamicin.** Instruct clients who have sulfite sensitivity, kidney disease, hearing loss or loss of balance due to ear problems, any neuromuscular disorders such as myasthenia gravis or Parkinson’s disease to talk to their doctor before they take gentamicin.

9. Gentamicin 240 mg will be drawn for administration by nurse in two syringes containing no more than 120 mg/3 ml of medication per syringe for intramuscular injection. The nurse will give one injection in each gluteal muscle. Remaining medication in vial will be immediately discarded. Dual therapy should be administered together with azithromycin on the same day preferably simultaneously and under direct observation.

10. **Refer to private physician for treatment and follow up if the client reports a medication allergy or condition which prohibits them from taking the dual treatment options listed above.** (Complete an ODH 399 on all referrals).

E. **Special Consideration:**

The public health nurse must ensure that another employee, preferably CPR certified is present who can assist if an emergency occurs before any injection can be administered. This person cannot be a client’s family member or friend.

IV. **CLIENT EDUCATION:**

A. Take prescribed oral medication appropriately (give handout).

B. Refer all sex partner(s) for testing and treatment if their last sexual contact with the client was within 60 days before onset of symptoms or diagnosis. If a client’s last sexual
intercourse was 60 days before onset of symptoms or diagnosis, the client’s most recent partner should be tested and treated.

C. Abstain from sex until client and partner(s)
   1. have completed a 7-day regimen or
   2. 7 days after a single dose regimen.

D. Return for evaluation should symptoms persist or recur.

E. For clients returning with continuing symptoms or possible reinfection, test again for gonorrhea and chlamydia no sooner than 3 weeks after completion of treatment. They may not be treated again without testing, unless their only exposure was through receptive anal sex or by performing oral sex.

F. Prevention measures (e.g., condoms) to prevent future infections.

V. CONSULTATION/REFERRALS:

A. Should symptoms persist or recur after completion of treatment, determine if client
   1. failed to comply with the treatment regimen; or
   2. was re-exposed to an untreated sex partner.

B. Client may be retreated with the initial regimen if the client failed to comply with the treatment regimen or client was re-exposed to an untreated sex partner.

C. Spermatic cord (testicular) torsion, a surgical emergency, should be considered in all cases, but it occurs more frequently among adolescents and in men without evidence of inflammation or infection. Men presenting with severe unilateral or bilateral pain and swelling, or fever, should be presumptively treated for acute epididymitis and referred to nearest Emergency facility for evaluation for torsion, testicular infarction, abscess, and necrotizing fasciitis using ODH 399 Referral form because testicular viability might be compromised.

REFERENCES:


Centers for Disease Control and Prevention (2016), Evaluation and Diagnosis of Penicillin Allergy for Healthcare Professionals.

