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## URETHRITIS

### DEFINITION

Term	Definition
Urethritis	Inflammation of the urethra caused by any etiology that manifests as urethral discharge, dysuria, urethral itching or meatal erythema.
Presumptive gonococcal urethritis (e.g. <i>Neisseria gonorrhoeae</i> )	Urethritis with microscopy confirmed typical intracellular diplococci (TID).
Non-gonococcal urethritis (NGU)	Urethritis with increased polymorphonuclear leukocytes (PMNs) and the absence of a positive laboratory test for <i>Neisseria gonorrhoea</i> or TID.
Urethritis not yet diagnosed (NYD)	Urethritis without immediate microscopy diagnosis.
Recurrent urethritis*	Persistence of urethral symptoms when the onset of treatment was at least two weeks prior, treatment was taken as directed, and there has been no re-exposure or new exposure (e.g., new or untreated partner).

\*For clients with recurrent urethritis refer to the [Recurrent Urethritis Decision Support Tool DST](#).

### POTENTIAL CAUSES

Bacterial:

- *Neisseria gonorrhoeae* (GC)

The DSTs are not intended to replace the RN(C)'s professional responsibility to exercise independent clinical judgment and use evidence to support competent, ethical care. The RN(C) must consult with or refer to a physician or nurse practitioner as appropriate, or whenever a course of action deviates from the DST.

- *Chlamydia trachomatis* (CT)
- *Mycoplasma genitalium*
- *Ureaplasma urealyticum*

**Viral:**

- adenovirus
- herpes simplex virus (HSV)

**Protozoan:**

- *Trichomonas vaginalis* (TV)

**Non-STI:**

- secondary to catheterization or other instrumentation or trauma of the urethra
- in association with other factors that contribute to urinary tract infection (e.g., prostate or cystitis unrelated to STI)
- underlying anatomical issue (e.g., urethral stricture, fistulae, post-operative complications)

## PREDISPOSING RISK FACTORS

- sexual contact where there is transmission through the exchange of body fluids

## TYPICAL FINDINGS

### Sexual Health History

- sexual contact with at least one partner
- may report sexual contact with a partner infected with HSV
- sexual contact with someone with confirmed positive laboratory test for STI

### Physical Assessment

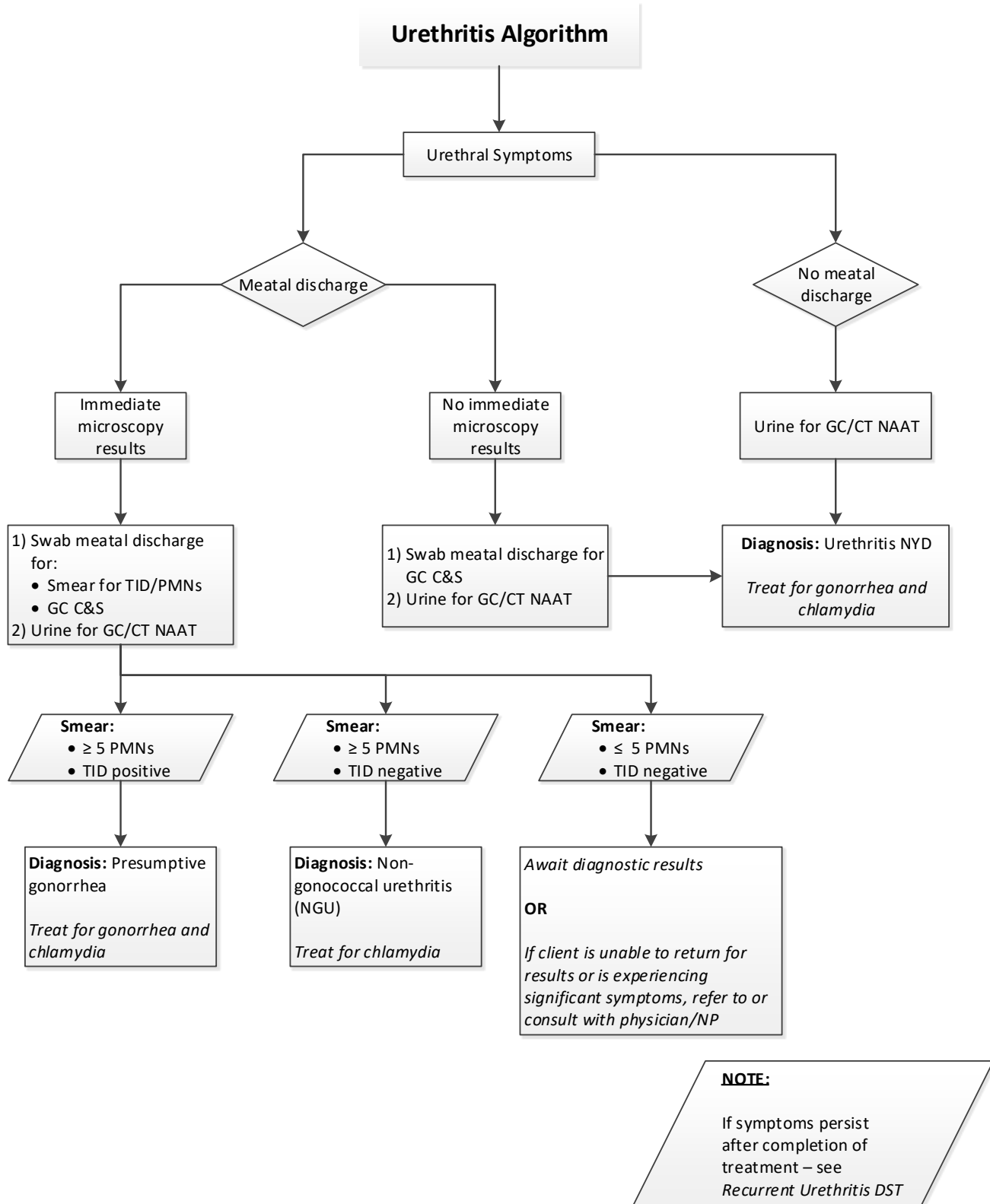
- urethral discharge
- painful urination (dysuria)
- urethral itch, irritation or awareness
- meatal erythema

## DIAGNOSTIC TESTS

Full STI screening is recommended. See the [STI Assessment DST](#).

- **Urethral swab. For symptomatic clients.** Collect the following specimens from visible discharge at the urethral opening, insertion into the urethra is not required:
  - smear for TID and PMNs (collect *only* if immediate microscopy is available) and
  - GC culture and sensitivity (C&S)
- **Urine specimen. For all clients.** Collect urine for GC/CT NAAT. Ideally the client should not have voided in the previous 1-2 hours, collect the first voided 10-20 ml. Note the following:
  - if urethral swabs are indicated, the urine specimen is collected after the urethral swab
  - may be collected as the only diagnostic test in agencies or circumstances where:
    - GC C&S is unavailable
    - the client declines urethral swab

## CLINICAL EVALUATION/CLINICAL JUDGMENT



## MANAGEMENT AND INTERVENTIONS

### Goals of Treatment

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

### TREATMENT OF CHOICE

Treatment is warranted in the following cases:

- presumptive gonorrhea– diagnosis is based on microscopy results
- non-gonococcal urethritis (NGU) – diagnosis is based on microscopy results
- urethritis not yet diagnosed (NYD) – when microscopy results are not immediately available
- sexual contacts of clients diagnosed with urethritis (see [\*Treatment of STI Contacts DST\*](#))

## TREATMENT CHOICE FOR URETHRITIS (NYD)

Treatment	Notes
<b>First Choice</b>	<p><b>General:</b></p> <ol style="list-style-type: none"> <li>1. Treatment covers both gonorrhea and chlamydia.</li> <li>2. <i>Canadian Guidelines for STI</i> (CGSTI, PHAC, 2013) recommend ceftriaxone IM and azithromycin PO for the treatment of uncomplicated anogenital and pharyngeal infection; however BC surveillance patterns of GC resistance suggest that both cefixime and ceftriaxone are appropriate choices for the treatment of GC.</li> <li>3. Future GC Treatment regimens will continue to reflect national recommendations in association with local GC antimicrobial resistance trends (AMR) trends.</li> <li>4. Retreatment is indicated if the client has missed 2 consecutive doses of doxycycline or has not completed a full 5 days of treatment.</li> <li>5. Consult physician or NP if client is unable to use cefixime, ceftriaxone, or azithromycin.</li> <li>6. See BCCDC <a href="#">STI Medication Handouts</a> for further medication reconciliation and client information.</li> <li>7. See <i>Monitoring and Follow-up</i> section for test-of-cure (TOC) requirements.</li> </ol> <p><b>Allergy and Administration:</b></p> <ol style="list-style-type: none"> <li>8. DO NOT USE ceftriaxone or cefixime if history of allergy or anaphylaxis to cephalosporins. Consult/refer if history of anaphylaxis or immediate reaction to penicillins.</li> <li>9. DO NOT USE azithromycin if history of allergy to macrolides.</li> <li>10. DO NOT USE doxycycline if pregnant and/or allergic to doxycycline or other tetracyclines.</li> <li>11. If an azithromycin or doxycycline allergy or contraindication exists, consult with or refer to a physician or NP for alternate treatment.</li> <li>12. Azithromycin and doxycycline are sometimes associated with gastrointestinal adverse effects. Taking medication with food and plenty of water may minimize adverse effects.</li> <li>13. The preferred diluent for ceftriaxone IM is 0.9 mls lidocaine 1% (without epinephrine) to minimize discomfort.</li> <li>14. DO NOT USE lidocaine if history of allergy to lidocaine or other local anesthetics. Use cefixime</li> </ol>
cefixime 800 mg PO in a single dose <b>and</b> azithromycin 1 gm PO in a single dose  <b>OR</b> ceftriaxone 250 mg IM in a single dose <b>and</b> azithromycin 1 gm PO in a single dose	
<b>Second Choice</b>	
cefixime 800 mg PO in a single dose <b>and</b> doxycycline 100 mg PO BID for 7 days  <b>OR</b> ceftriaxone 250 mg IM in a single dose <b>and</b> doxycycline 100 mg PO BID for 7 days	
<b>Third Choice</b>	

## TREATMENT CHOICE FOR URETHRITIS (NYD)

Treatment	Notes
azithromycin 2 gm PO in a single dose	<p>PO as alternate treatment.</p> <p>15. For IM injections of ceftriaxone the ventrogluteal site is preferred. (See <a href="http://www.bccdc.ca/health-professionals/clinical-resources/immunization/vaccine-administration">http://www.bccdc.ca/health-professionals/clinical-resources/immunization/vaccine-administration</a>).</p> <p>16. 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 BCCDC <i>CDC Manual- Chapter 2: Immunization – Part 3: Management of Anaphylaxis in a Non-Hospital Setting</i>, November 2016, available at: <a href="http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/Part_3_Anaphylaxis.pdf">http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%202%20-%20Imms/Part_3_Anaphylaxis.pdf</a>.</p> <p>17. 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.</p> <p>18. Advise client they may experience pain, redness and swelling at the injection site. If any of these effects persist or worsen, advise to contact health care provider.</p> <p>19. Recent data has emerged regarding azithromycin and QT prolongation. Although rare, it is more significant in older populations, those with pre-existing heart conditions, arrhythmias or electrolyte disturbances.</p> <p>It is unclear how significant these findings are in young to mid-age healthy adults consuming a one-time dose of azithromycin; however, please use the following precautions:</p> <p>Consult with or refer to an NP or physician if the client:</p> <ul style="list-style-type: none"> <li>• has a history of congenital or documented QT prolongation.</li> <li>• has a history of electrolyte disturbance in particular hypokalemia, hypomagnesaemia.</li> <li>• has clinically relevant bradycardia, cardiac arrhythmia or cardiac insufficiency.</li> <li>• is on any of the following medications: <ul style="list-style-type: none"> <li>○ Antipsychotics: pimozone (Orap®), ziprasidone (Zeldox®)</li> <li>○ Cardiac: dronedarone (Multaq®)</li> <li>○ Migraine: dihydroergotamine (Migranal®), ergotamine (Cafergot®)</li> </ul> </li> </ul>

### TREATMENT CHOICE FOR URETHRITIS – Non-gonococcal (NGU)

Diagnosis - Type	Treatment	Notes
<p><b>Non-gonococcal urethritis (NGU) – when immediate microscopy is available and results include:</b></p> <ul style="list-style-type: none"> <li>• urethral swab for smear is negative for TID</li> <li>• urethral swab for smear ≥ 5 PMNs</li> </ul>	<p><b>First Choice</b></p> <hr/> <p>doxycycline 100 mg PO BID for 7 days</p> <p><b>OR</b></p> <p>azithromycin 1 gm PO in a single dose</p>	<p>See <a href="#">Notes</a> section on previous two pages.</p>



## PARTNER COUNSELLING AND REFERRAL

Counsel clients to notify people who may have been exposed through sexual contact within the previous 60 days that they require testing and treatment to cover chlamydia and gonorrhea. If no sexual contact in the past 60 days then the client may notify their last sexual contact regarding testing and treatment (see [Treatment of STI Contacts DST](#)).

## MONITORING AND FOLLOW-UP

Follow-up is based on test results or recurrence of symptoms. If test results positive for STI, refer to appropriate *STI DST* for monitoring and follow-up.

## POTENTIAL COMPLICATIONS

- persistent or recurrent urethritis (see [Recurrent Urethritis DST](#))
- epididymitis
- sexually-acquired reactive arthritis
- stricture (rare)
- prostatitis (rare)

## CLIENT EDUCATION

Counsel client regarding:

- abstaining from sexual activity during the 7-day course of treatment or for 7 days post single-dose therapy for clients and their contacts.
- informing last sexual contact AND any sexual contacts within the last 60 days that they require testing and treatment.
- methods of partner notification
- the appropriate use of medications (dosage, side effects, and need for re-treatment if dosage not completed, or symptoms do not resolve).
- harm reduction (e.g., condom use significantly reduces the risk of transmission).
- the benefits of routine STI screening.
- the potential complications from untreated urethritis.
- co-infection risk for HIV when another STI is present.
- the asymptomatic nature of STI.

- the importance of revisiting the clinic if symptoms persist or recur 14 days or more after treatment has been initiated.
- repeat testing is not necessary unless symptoms do not resolve 14 days or more after antibiotic treatment has been initiated.
- urethritis can be transmitted through oral, vaginal and anal sexual contact. Organisms responsible for the infection may reside in the throat, vagina or rectum of sexual partners, and may not be detectable with testing.

## CONSULTATION AND/OR REFERRAL

Consult or refer to physician or NP, if the client is experiencing complications associated with urethritis (e.g., epididymitis – see BCCDC’s non-certified practice [\*Epididymitis DST\*](#)).

## DOCUMENTATION

- urethritis is not reportable
- as per agency policy

## REFERENCES

More recent editions of any of the items in the reference list may have been published since this DST was published. If you have a newer version, please use it.

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