This decision support tool is effective as of February 2014. For more information or to provide feedback on this or any other decision support tool, email certifiedpractice@crnbc.ca

URETHRITIS (MALE)

DEFINITION

Inflammation of the urethra caused by any etiology that manifests as urethral discharge, dysuria, urethral itching or meatal erythema. Categorized as a syndrome.

Urethritis with microscopy confirmed typical intracellular diploccoci (TID) is considered presumptive of *Neisseria gonorrhoeae*.

Urethritis with increased polymorphonuclear leukocytes (PMNs) and the absence of a positive laboratory test for *Neisseria gonorrhea* or TID is a condition referred to as non-gonococcal urethritis (NGU).

Urethritis without microscopy diagnosis [i.e., when laboratory microscopy is not immediately available to assist in diagnosis, is referred to as urethritis not yet diagnosed (NYD)].

Recurrent urethritis refers to the 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 to infection through sexual contact (e.g., new partner or untreated partner). For clients with recurrent urethritis refer to the *Recurrent Urethritis Decision Support Tool (DST).*

POTENTIAL CAUSES

Bacterial

- *Neisseria gonorrhoeae (GC)*
- *Chlamydia trachomatis (CT)*
- *Mycoplasma genitalium*
- *Ureaplasma urealyticum*

Viral

- Adenovirus
- HSV (herpes simplex virus)

Protozoa

- *Trichomonas vaginalis*

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)

PREDISPOSING RISK FACTORS

- sexual contact
- identified as a sexual contact of someone with an STI

TYPICAL FINDINGS

Sexual Health History

- sexual contact with at least one partner
- may report sexual contact with a partner infected with HSV
- identified as a sexual contact for someone with STI in past 60 days
- dysuria

Physical Assessment

- urethral discharge
- urethral irritation
- meatal erythema

Females

- see Female Lower UTI DST

DIAGNOSTIC TESTS

- urethral swab; if urethral discharge is present, may collect specimen from visible discharge and insertion into the urethra is not required.
  - GC culture and sensitivity (C&S) (recommended) and
  - smear for typical intracellular diploccoci (TID) and polymorphonuclear leukocytes (PMNs) (if available)
- urine specimen for Nucleic Acid Amplification Test (NAAT) (GC/CT)
  - ideally the client should not have voided in previous 1-2 hours /collect first 10-20 mls.
  - collect after urethral swab
  - if urine testing is not available urethral swab for NAAT (GC) can be collected
  - may be collected as the only diagnostic test in agencies or circumstances where:
    - GC C&S is unavailable
    - client is asymptomatic
    - client is unable to tolerate a swab

Interpreting Microscopy Results

Not all registered nurses will have immediate access to microscopy lab results for smears.

See Urethritis Algorithm (Male) on page 4.

When available, microscopy results are interpreted as:

- gram stain microscopy positive for ≥ 5 polymorphonuclear leukocytes per high power field (x1000) **and** typical intracellular diploccoci is indicative of presumptive gonorrhea

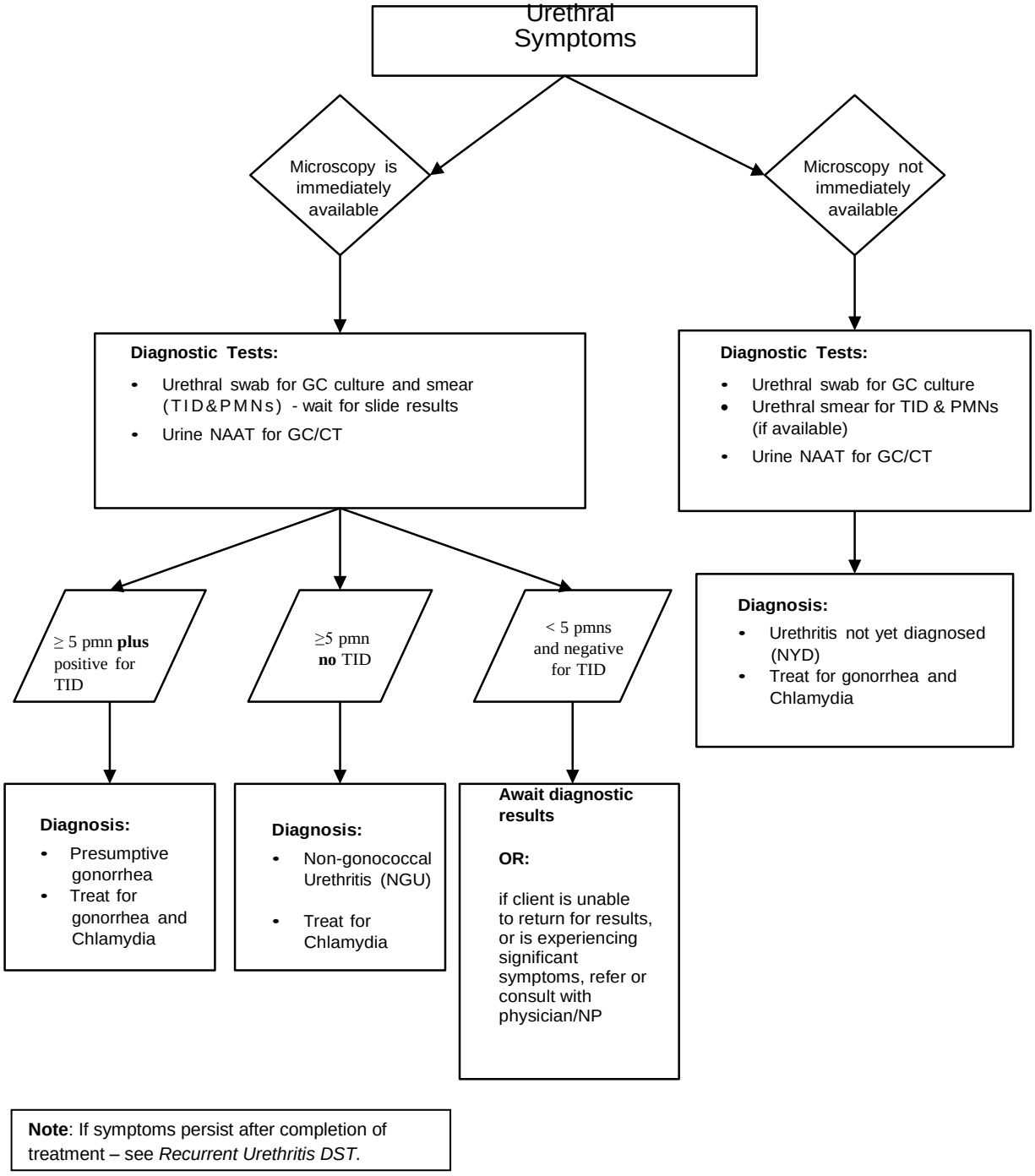
- gram stain microscopy positive for ≥ 5 polymorphonuclear leukocytes per high power field (x1000) **without** typical intracellular diploccoci is indicative of non-gonococcal urethritis (NGU)

- microscopy results of < 5 polymorphonuclear leukocytes requires clinical judgment from the nurse and follow-up may include consultation with physician or nurse practitioner about immediate treatment or waiting for C&S or NAAT results prior to initiating treatment

Note: Polymorphonuclear leukocytes are sometimes referred to as *polys, pus cells, or white blood cells.*

CLINICAL EVALUATION/CLINICAL JUDGMENT

Urethritis Algorithm (Male)



Note: If symptoms persist after completion of treatment – see *Recurrent Urethritis DST*.

MANAGEMENT AND INTERVENTIONS

Goals of Treatment

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

TREATMENT OF CHOICE

Treatment is warranted in the following cases:

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

TREATMENT CHOICE FOR URETHRITIS (NYD)

Treatment	Notes
First Choice *See Notes 16,17 & 18 cefixime 800 mg PO in a single dose **and** azithromycin 1 gm PO in a single dose OR ceftriaxone 250 mg IM in a single dose **and** azithromycin 1 gm PO in a single dose	1. Treatment covers 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 penicillins. 3. The preferred diluent for ceftriaxone IM is 0.9 mls lidocaine 1% (without epinephrine) to minimize discomfort. 4. DO NOT USE lidocaine if history of allergy to lidocaine or other local anaesthetics. Use cefixime PO as alternate treatment. 5. DO NOT USE azithromycin if history of allergy to macrolides. 6. If an azithromycin or doxycycline allergy or contraindication exists see alternate treatment. 7. DO NOT USE doxycycline if pregnant and/or allergic to tetracycline. 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 days of treatment then retreatment is indicated 9. Consult physician or NP if client is unable to use cefixime, ceftriaxone, or azithromycin. 10. 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 www.bccdc.ca/NR/rdonlyres/52EA275F-0791-4164-ABA9-07F0183FF103/0/SectionV_Anaphylaxis_Jan05.pdf 11. 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. 12. Advise client they may experience pain redness and swelling at the injection site or diarrhea. If any of these effects persist or worsen advise to contact health care provider. 13. Azithromycin is associated with a significant incidence of gastrointestinal adverse effects. Taking medication with food or administering prophylactic anti-emetics may minimize adverse effects.
Second Choice cefixime 800 mg PO in a single dose **and** doxycycline 100mg BID for 7 days OR ceftriaxone 250 mg IM in a single dose **and** doxycycline 100mg BID for 7 days	
Third Choice azithromycin 2 gm PO in a single dose	

Fourth Choice

spectinomycin 2 g IM in a single dose

and

azithromycin 1 gm PO in a single dose

Alternate Treatment: If Doxycycline & Azithromycin are contraindicated

First Choice

cefixime 800mg po in a single dose

and

amoxicillin 500mg po TID for 7 days

OR

ceftriaxone 250mg IM in a single dose

and

amoxicillin 500mg po TID for 7 days

Second Choice

cefixime 800mg po in a single dose

and

erythromycin 500mg po QID for 7 days

Note: If this dose of erythromycin is not tolerated then use:

erythromycin 250mg po QID for 14 days

14. See BCCDC Client and Medication Information Sheets for further medication reconciliation and client information. Available at www.stiresource.com/brochures/indexbrochures.php
15. For IM injections of ceftriaxone and spectinomycin, the ventrogluteal site is preferred. (See http://www.bccdc.ca/imm-vac/ForHealthProfessionals/ImmsCompetency.htm
16. See monitoring and follow-up for test of cure requirements.
17. In client populations who are MSM, the preferred co-treatment for Chlamydia coverage is azithromycin as it further potentiates treatment for gonorrhea.
18. 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 currently indicate first choice treatments in this DST are equivalent. BC recommendations continue to be updated according to provincial surveillance data.

TREATMENT CHOICE FOR URETHRITIS – Non-gonococcal (NGU)

Diagnosis - Type	Treatment	Notes
Non-gonococcal urethritis (NGU) – when immediate microscopy is available and: • urethral swab for smear is negative for TID • urethral swab for smear ≥ 5 PMNs	**First Choice** doxycycline 100 mg po bid for 7 days OR azithromycin 1 gm po in a single dose **Second Choice** amoxicillin 500 mg po tid for 7 days **Third Choice** erythromycin 500 mg po qid for 7 days **or** if unable to tolerate 500 mg erythromycin dosing then use: erythromycin 250 mg po qid for 14 days	1. To abstain from sexual activity during the 7 day course of treatment or for 7 days post single dose therapy for clients and their contacts 2. If client has missed more than 2 consecutive doses or did not complete 5 consecutive days of doxycycline treatment then re-treatment is indicated 3. If doxycycline is contraindicated (e.g., allergy or treatment compliance) use azithromycin or substitute with second or third choice.

PARTNER COUNSELLING AND REFERRAL

Advise treatment of all sexual contacts in the past 60 days or last sexual contact if no partner within past 60 days (see *STI Treatment of Contacts DST*)

MONITORING AND FOLLOW UP

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

POTENTIAL COMPLICATIONS

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

CLIENT EDUCATION

Counsel client:

- to abstain from sexual activity during the 7 day course of treatment or for 7 days post single dose therapy for clients and their contacts
- regarding the appropriate use of medications (dosage, side effects and need for re-treatment if dosage not completed)
- to inform any sexual contacts within the last 60 days that they require testing and treatment
- regarding harm reduction measures (e.g., condom use)
- regarding potential complications from untreated urethritis
- regarding the co-infection risk for HIV when another STI is present
- regarding the asymptomatic nature of STI and HIV
- regarding the importance of revisiting clinic if symptoms persist after treatment has been completed for one week
- that repeat testing is not necessary unless symptoms do not resolve
- that 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 nurse practitioner:

- if client is experiencing complications associated with urethritis (e.g. epididymitis – see BCCDC's non-certified practice *Epididymitis DST*)

DOCUMENTATION

- non-reportable
- as per agency policy

REFERENCES

For help obtaining any of the items on this list, please contact CRNBC Helen Randal Library at circdesk@crnbc.ca

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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