This decision support tool is based on best practice as of July 2009. For more information or to provide feedback on this or any other decision support tools, e-mail certifiedpractice@crnbc.ca

**URETHRITIS NYD AND RECURRENT URETHRITIS (MALE)**

**DEFINITION**

Urethritis refers to inflammation of the urethra that is caused by any etiology that manifests as urethral discharge, painful urination, or itching at the end of the urethra. Urethritis is categorized as a syndrome.

Undiagnosed urethritis (male urethritis NYD) describes a syndrome in which manifestations of urethritis are present and laboratory tests results are pending and/or the registered nurse does not have the resources to undertake independent microscopy.

Urethritis, in the absence of positive laboratory test for *Neisseria gonorrhoeae*, is a condition referred to as non-gonococcal urethritis (NGU: See NGU DST). Gonococcal urethritis (GU) refers to urethritis in the presence of confirmed positive laboratory test for *Neisseria gonorrhoeae*.

Recurrent urethritis refers to the persistence of urethral symptoms after treatment has been taken as directed and there has been no re-exposure to infection through sexual contact

**Note:** Syndromic management of undiagnosed urethritis is warranted when clients are symptomatic and awaiting laboratory test results. This practice is recommended to alleviate symptoms and reduce the spread of STI infection.

**POTENTIAL CAUSES**

- **Bacterial:** *Neisseria gonorrhoeae, Chlamydia trachomatis, Mycoplasma genitalium, Trichomonas vaginalis, Ureaplasma urealyticum*
- **Viral:** adenovirus, HSV (herpes simplex virus)
- **Non-STI:** secondary to catheterization or other instrumentation 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 in which exchange of body fluid may occur
- May report multiple sexual partners
- Identified sexual contact in previous 60 days.

**TYPICAL FINDINGS**

**Sexual Health History**

- Sexual contact with at least one partner
- May report sexual contact with a partner infected with HSV
- May report multiple sexual partners
- Identified as a sexual contact for someone with STI in past 60 days
- Painful urination
- Urethral discharge
- Urethral itching
Physical Assessment

**Males**
- Urethral discharge
- Painful or difficult urination
- Urethral itch
- Testicular pain, swelling (symptoms of epididymitis)

**Females**
- See Female Lower UTI DST

Diagnostic Testing

**Males**
- Urethral swab for smear and C&S (GC): If immediate results for urethral smear are available: See Non-Gonococcal Urethritis DST (Clinical judgement flow chart). If urethral discharge present, can collect discharge from urethral opening without inserting swab into urethra.
- Urine specimen for NAAT (CT and 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 if urine NAAT CT/GC testing unavailable.
**CLINICAL EVALUATION/CLINICAL JUDGMENT**

**Over-arching Algorithm for Male Urethral Symptoms**

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Urethral Symptoms</th>
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<tbody>
<tr>
<td>STAT Smear results are not available</td>
<td>STAT Smear results are available</td>
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<th>Step 2</th>
<th>Diagnostic Test:</th>
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<tr>
<td>Urethral swab for smear and culture</td>
<td>Urethral swab for STAT smear and culture</td>
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<tr>
<td>Urine specimen for NAAT (GC/CT)</td>
<td>Urine specimen for NAAT (GC/CT)</td>
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<tr>
<th>Step 3</th>
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<tr>
<td>Urethritis NYD</td>
<td>Urethritis NYD</td>
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<tr>
<td>Treat: for GC/CT</td>
<td>Treat: for GC/CT</td>
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<thead>
<tr>
<th>Step 4</th>
<th>Symptoms</th>
<th>Symptoms</th>
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<tr>
<td>Resolve</td>
<td>Persist</td>
<td>Resolve</td>
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<tr>
<th>Step 5</th>
<th>NYD</th>
<th>See DST: Recurrent NGU</th>
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<tr>
<td>See DST: Recurrent Urethritis</td>
<td>See DST: Recurrent NGU</td>
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Note: If STAT urethral smear results available, see NGU DST.
Treatment is warranted in the following cases:
- All males with Undiagnosed Urethritis (smear results are not immediately available, indicated by urethral burning, itching, discharge, or any other description of an irritation in the urethra)
- Sexual partners of clients diagnosed with urethritis.
MANAGEMENT AND INTERVENTIONS

Goals of Treatment
- Treat infection
- Alleviate symptoms
- Prevent complications
- Prevent spread of infection

TREATMENT OF CHOICE FOR URETHRITIS NYD

Abstain from sexual contact for 7 days after starting treatment and until partners have completed treatment.

First Choice:
- Cefixime 400 mg po stat (one dose) AND Doxycycline 100 mg po bid for 7 days.

Note: If client has not completed 5 consecutive days of Doxycycline at 100 mg po bid, or has missed more than 2 consecutive doses, re-treatment is indicated.

ALTERNATE TREATMENT FOR URETHRITIS NYD

1. Do not use Cefixime if history of allergy to Penicillin or Cephalosporins.
2. Do not use Ciprofloxacin in clients who are under 18 years of age.
3. If Doxycycline is contraindicated eg. treatment compliance and/or allergy, substitute with second or third choice.

Second Choice:
- Cefixime 400 mg po stat (one dose) and Azithromycin 1 g po stat (one dose)

Third Choice:
- Azithromycin 2 g po stat (one dose). This dose of Azithromycin covers both Gonorrhea and Chlamydia so no additional treatment is required

Fourth Choice:
- Spectinomycin 2 g IM stat (one dose) AND Doxycycline 100 mg po bid for 7 days

Fifth Choice:
- Ciprofloxacin 500 mg po stat (one dose) AND Doxycycline 100 mg po bid for 7 days
  Do not use Ciprofloxacin in clients less than 18 years of age.
**Male Recurrent Urethritis**

Client’s subsequent presentation post treatment for Urethritis NYD and the following criteria are met:
- All medication has been taken as directed
- The onset of treatment was at least two weeks prior
- No re-exposure to untreated partner
- No exposure to new partner
- Test results were negative for: Gonorrhea, Chlamydia and Urethral Smear

*If all criteria are not met, see Urethritis NYD DST*

### Step 2
Repeat the following tests and await results:
- Urethral Smear for PMNs
- Gonorrhea/Chlamydia (Urine NAAT)

### Step 3
- **Negative Smear Results** (< 5 PMNs)
- **Positive Smear Results** (≥ 5 PMNs)

### Step 4
- **Refer to Physician/NP**
- **Diagnosis:** Recurrent Urethritis

### Step 5
- **Treatment:**
  - 1st Choice: Erythromycin 500mg PO QID for 14 days
  - *See DST for Alternate Treatment*

### Step 6
- **Partner Counselling**
  - Partners do not need treatment
TREATMENT OF CHOICE FOR RECURRENT URETHRITIS

Partners do not require treatment

First Choice:
- Erythromycin 500 mg po QID for 14 days

Second Choice:
- Doxycycline 100 mg po BID for 14 days.

Note: If initial treatment for Urethritis NYD included Azithromycin 1gm po, then choose Doxycycline 100 mg BID for 14 days as the first choice of treatment for Recurrent Urethritis.

TREATMENT OF SEXUAL CONTACTS WHO ARE PREGNANT OR NURSING MOTHERS

- Consult/refer to physician/NP in treating pregnant and/or nursing females who are contacts to Urethritis
- Do not use Doxycycline in pregnancy
  - May substitute the Amoxicillin or Erythromycin alternate treatment
- Do not use Ciprofloxacin in pregnancy
- Azithromycin may be used in pregnancy with caution for clients who are unable to complete full dose of other antibiotics
- If Doxycycline is contraindicated for reasons such as pregnancy or allergy, substitute Amoxicillin 500 mg po tid for 7 days.

OR

- Erythromycin 500 mg po qid for 7 days. If this dose of Erythromycin is not tolerated then use; Erythromycin 250 mg po qid for 14 days.

PARTNER NOTIFICATION

- Partner notification by client (self/patient referral as per Canadian Guidelines on Sexually Transmitted Infections page 22 - 27)
- Advise treatment of all sex partners of clients who have Urethritis NYD in the past 60 days
- Partners of clients who have Recurrent Urethritis do not require treatment.

FOLLOW UP

- If test results are negative, follow up is not indicated. If test results are positive, see appropriate DST (CT or GC) for appropriate follow up.

POTENTIAL COMPLICATIONS

Males:
- Epididymitis
- Stricture - rare
- Reiter’s syndrome
- Prostatitis - rare
CLIENT EDUCATION /DISCHARGE INFORMATION

Counsel client with Urethritis NYD:

- to abstain from sexual contact for 7 days during treatment or for 7 days post single dose medications.
- to abstain from sexual contact with partners until they have completed treatment.
- regarding the appropriate use of medications (dosage, side effects and need for re-treatment if dosage not completed).
- to inform last sexual contact AND any sexual contacts within the last 60 days that they require testing and treatment.
- regarding harm reduction measures (e.g., condom use).
- regarding complications from untreated Urethritis.
- regarding the co infection risk for HIV when another STI is present and 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 TOC (test of cure) 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.

Counsel client with recurrent Urethritis NYD:

- that partners of clients with Recurrent Urethritis do not require treatment
- regarding the appropriate use of medications (dosage, side effects, and need for re-treatment if dosage not completed)
- regarding harm reduction measures (e.g. condom use)
- regarding the importance of revisiting clinic if symptoms persist after treatment has been completed for one week.

CONSULTATION AND/OR REFERRAL

- If symptoms persist or recur after completed therapy for recurrent urethritis and all tests are negative.

DOCUMENTATION

- Non-reportable
- As per agency guidelines.

REFERENCES

Provincial Health Nurses Pre-Determined STI Treatment Schedule. February 2007. STI/HIV Prevention and Control. BC Centre for Disease Control.
STI working group. (2009)