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

**NON-GONOCOCCAL URETHRITIS (NGU) (MALE)**

**DEFINITION**

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

Urethritis, in the absence of positive laboratory test for *Neisseria gonorrhoeae* but the presence of increased Polymorphonuclear Neutrophils (PMNs), is a condition referred to as Non-gonococcal urethritis (NGU).

**POTENTIAL CAUSES**

- **Bacterial:** *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.

**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
- Non-STI risk factors are not typically associated with NGU but are associated with UTI. (See UTI DST).

**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 NGU in past 60 days
- Painful urination
- Urethral discharge
- Urethral itching

**Physical Assessment**

**Males**

- Urethral discharge (most often mucoid)
- Painful or difficult urination
- Urethral itch
- Testicular pain, swelling (symptoms of epididymitis)

**Females:**

- See Female Lower UTI DST

**Diagnostic Tests:**

**Males:**

- Urethral swab for smear and C&S (GC)

**Note:** Urethral discharge may also be collected without fully inserting the swab into the urethral opening. Have client milk the urethra and expel discharge and collect with swab.
Reproductive Health Certified Practice

Sexually Transmitted Diseases: **NON-GONOCCCAL URETHRITIS**

- If smear results indicate \( \geq 5 \) polymorphonuclear (PMN) cells in 5 microscopic fields AND the presence of typical intracellular diplococcic (TID), this indicates presumptive Gonorrhoea → see Gonorrhoea DST
- If smear result indicates no typical intracellular diplococci and \( \geq 5 \) PMNs in 5 microscopic fields this indicates Non-Gonococcal Urethritis

- Urine Specimen for NAAT (Gonorrhoea and Chlamydia): first 10-20 ml preferably after client has not voided in previous 2 hours. May be collected as the only diagnostic test in agencies or circumstances where:
  - C&S is unavailable
  - Urethral smear is unavailable
  - Client is unable to tolerate swab
- Urethral Swab for NAAT CT/GC if urine NAAT CT/GC testing unavailable.

**CLINICAL EVALUATION / CLINICAL JUDGMENT**

<table>
<thead>
<tr>
<th>Non Gonococcal Urethritis (NGU) (Male)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
</tr>
<tr>
<td>Client Presents with Urethral Symptoms</td>
</tr>
</tbody>
</table>

**Step 2**

- STAT smear results are not available
- STAT smear results are available

**Step 3**

- **Diagnosis:** Urethritis NYD (see Urethritis DST)
- TID and \( \geq 5 \) PMNs
- \( \geq 5 \) PMNs

**Step 4**

- **Diagnosis:** Presumptive Gonorrhoea (see Gonorrhoea DST)
- **Diagnosis:** NGU

**Step 5**

- **Treatment:**
  1\(^{st}\) Choice: Doxycycline 100mg PO BID for 7 days
  *See DST for Alternate Treatment

**Step 6**

- **Partner Counselling**
  - Patient Referral: advise all partners in previous 60 days that they require testing and treatment
MANAGEMENT AND INTERVENTIONS

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

TREATMENT OF CHOICE

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

First Choice:
- 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

2. If Doxycycline is contraindicated, substitute

Second Choice:
- Azithromycin 1g po stat (one dose)

Third Choice:
- Amoxicillin 500 mg po tid for 7 days

Fourth Choice:
- 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.

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 NGU.
- Do not use Doxycycline in pregnancy
  - May substitute the Amoxicillin or Erythromycin alternate treatment
  - Azithromycin may be used in pregnancy with caution for clients who are unable to complete full dose of other antibiotics
  - TOC (test of cure) is always recommended in pregnancy.

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 in past 60 days.

MONITORING AND FOLLOW UP

- No follow up indicated if test results are negative
- Return to clinic if symptoms do not resolve after 2 weeks from the onset of treatment.
POTENTIAL COMPLICATIONS

- Epididymitis
- Stricture - rare
- Reiter’s syndrome
- Urethritis
- Arthritis
- Prostatitis - rare

CLIENT EDUCATION /DISCHARGE INFORMATION:

Counsel client:
- to abstain from sexual contact for 7 days during treatment (e.g. with Doxycycline) or for 7 days post single dose therapy (e.g. Azithromycin).
- To abstain from sexual contact with partners until they have completed treatment.
- to inform last sexual contact AND any sexual contacts within the last 60 days that they require testing and treatment.
- regarding the appropriate use of medications (dosage, side effects, and need for re-treatment if medication is taken incorrectly).
- regarding harm reduction (condom use significantly reduces the risk of transmission).
- regarding the benefits of routine STI and HIV screening.
- regarding the complications from untreated NGU.
- 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.
- that repeat assessment is not necessary unless symptoms do not resolve after one week from the completion of treatment.

CONSULTATION AND/OR REFERRAL:

If symptoms persist after two weeks from the onset of treatment, client should be reassessed. See DST for Recurrent NGU.

DOCUMENTATION:

- Infection is 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.