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

MUCOPURULENT CERVICITIS

DEFINITION

Inflammation of the cervix with mucopurulent or purulent discharge from the cervical os

POTENTIAL CAUSES

Bacterial

- *Chlamydia trachomatis* (CT)
- *Neisseria gonorrhoeae* (GC)

Viral

- Herpes Simplex Virus (HSV)

Protozoal

- *Trichomonas vaginalis*

Non STI

- *Chemical irritants*
- *Vaginal douching*
- *Persistent disruption of vaginal flora*

PREDISPOSING RISK FACTORS

- sexual contact where there is transmission of bacteria or viruses from one person to another through exchange of body fluids or skin to skin contact
- multiple partners
- sexual contact with at least one partner

- contact to a known case of STI
- age <19 years
- street involved
- incomplete STI medication treatment
- previous STI

TYPICAL FINDINGS

Sexual Health History

- sexual contact with at least one partner
- increased abnormal vaginal discharge
- dyspareunia
- bleeding after sex or between menstrual cycles
- women may be asymptomatic
- external or internal genital lesions may be present with HSV infection
- contact to a known case of STI

Physical Assessment

Cardinal Signs

- mucopurulent discharge from the cervical os (thick yellow or green pus) and /or friability of the cervix (sustained bleeding after swabbing gently).

The following may also be present:

- abnormal vaginal discharge
- cervical erythema/edema

Other Signs

- cervicitis associated with HSV infection:
  - cervical lesions usually present
  - may have external genital lesions with swollen inguinal nodes

Notes:

1. Women may experience mild to moderate bleeding during cervical screening with spatula, cytobrush and/or endocervical nucleic acid amplification testing (NAAT) for gonorrhea (GC) and Chlamydia (CT). This is common and does not necessarily indicate MPC. Friability, which includes frank and sustained bleeding post cervical screening, is a potential sign of MPC.
2. Women who present with symptoms of mucopurulent cervicitis should also be assessed for signs of pelvic inflammatory disease through bi-manual exam for tenderness. If PID is present, refer to physician or nurse practitioner for further assessment.
3. A bi-manual exam may be too uncomfortable for women with cervical lesions due to HSV infection and they should be referred to a physician or nurse practitioner for further assessment and treatment.

Diagnostic Tests

Full STI screening is recommended including:

- vaginal swabs for:
    - yeast
    - bacterial vaginosis
    - *Trichomonas vaginalis*

and

- cervical Swabs for:
    - Culture and sensitivity (C&S) (GC)
    - (NAAT) (GC/CT)
    - HSV polymerase chain reaction (PCR) if lesions are present

CLINICAL EVALUATION/CLINICAL JUDGMENT

- treat all female clients with MPC, as indicated by purulent discharge visible from the cervical os, even when no laboratory results are available
- treat all persons identified as sexual contacts
- if PID or HSV is clinically suspected: see PID DST or HSV DST section

MANAGEMENT AND INTERVENTIONS

Goals of Treatment

- treat infection
- prevent complications
- prevent the spread of infection

TREATMENT OF CHOICE

Treatment	Notes
First Choice ***See Notes Section: 17 & 18**	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, azithromycin, or doxycycline. 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.
cefixime 800 mg PO in a single dose **and** azithromycin 1 gm PO in a single dose OR cefixime 800 mg PO in a single dose **and** doxycycline 100mg BID for 7 days	
Second Choice	
ceftriaxone 250 mg IM in a single dose **and** azithromycin 1 gm PO in a single dose 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 BC cefixime 800 mg with azithromycin 1gm po; OR ceftriaxone 250 mg IM with azithromycin 1 gm po have been equally effective in treating GC infection in all populations.
18. Future GC Treatment regimens will continue to reflect national recommendations in association with local GC antimicrobial resistance trends (AMR) trends. For more information on GC AMR trends in BC refer to the BC Public Health Microbiology & Reference Laboratory: 2013 Laboratory Trends at: http://www.bccdc.ca/NR/rdonlyres/F95329A2-AEC6-4A6D-B213-7B911BB70F14/0/July2013LaboratoryTrends.pdf

OR ceftriaxone 250mg IM 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	

PREGNANT OR BREASTFEEDING WOMEN

For all pregnant or breastfeeding clients consult or refer to a physician or nurse practitioner.

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 uncomplicated 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.

MONITORING AND FOLLOW UP

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

POTENTIAL COMPLICATIONS

- pelvic inflammatory disease (PID)
- infertility
- ectopic pregnancy
- chronic pelvic pain
- sexually acquired reactive arthritis
- disseminated gonococcal infection

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
- to inform last sexual contact AND any sexual contacts within the last 60 days that they require testing and treatment.
- regarding 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 of untreated cervicitis
- regarding the asymptomatic nature of STI and the increased likelihood for HIV infection when a STI is present

CONSULTATION AND/OR REFERRAL

Consult a physician or nurse practitioner in the following situations:

- assessment indicates PID
- HSV infection is suspected
- Pregnancy and breastfeeding

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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