Certified Practice

DST 905 Care and Treatment Plan:
Mucopurulent Cervicitis (MPC)

Definition

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

Registered Nurses with **Reproductive Health – Sexually Transmitted Infections** Certified Practice designation (RN(C)) are authorized to manage, diagnose, and treat individuals with mucopurulent cervicitis.

Potential Causes

Bacterial:

- Chlamydia trachomatis (CT)
- Neisserria gonorrhoeae (GC)

Viral:

- Herpes simplex virus (HSV)

Protozoan:

- Trichomonas vaginalis (TV)

Non-STI:

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

Predisposing Risk Factors

- Sexual contact where there is transmission through the exchange of body fluids
- Sexual contact with at least one partner
- Sexual contact with someone with confirmed positive laboratory test for STI
- Incomplete STI medication treatment
- Previous STI

Typical Findings

Sexual History

- May be asymptomatic
- Sexual contact with at least one partner
- Increased abnormal vaginal discharge
- Dyspareunia
- Bleeding after sex or between menstrual cycles
- External or internal genital lesions may be present with HSV infection
- Sexual contact with someone with confirmed positive laboratory test for 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 change in 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) Clients 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 mucopurulent cervicitis (MPC). Friability, which includes frank and sustained bleeding post-cervical screening, is a potential sign of MPC.
2) Clients who present with symptoms of MPC should also be assessed for signs of pelvic inflammatory disease (PID) through bimanual exam for tenderness. If PID is present, consult with or refer to a physician or nurse practitioner (NP) for further assessment.

3) A bimanual exam may be too uncomfortable for clients with cervical lesions due to HSV infection; they should be referred to a physician or NP for further assessment and treatment.

Diagnostic Tests

Full STI screening is recommended, including:

- Vaginal swabs for:
  - Yeast
  - Bacterial vaginosis
  - GC/CT/trichomonas NAAT

AND

- Cervical swabs for:
  - GC culture and sensitivity (C&S)
  - GC/CT NAAT – if vaginal specimen not collected
  - HSV polymerase chain reaction (PCR), if lesions are present on the cervix

Clinical Evaluation/Clinical Judgement

- Treat all clients with MPC, as indicated by mucopurulent discharge visible from the cervical os, even when no laboratory results are available
- Treat all persons identified as a sexual contact
- If PID or HSV is clinically suspected; see *PID DST* or *HSV DST*

Management and Interventions

Goals of Treatment

- Treat infection
- Prevent complications
- Prevent the spread of infection

Treatment of Choice

Treatment	Notes
First Choice Cefixime 800mg in a single dose AND Azithromycin 1gm PO in a single dose OR Ceftriaxone 250mg IM in a single dose AND Azithromycin 1gm PO in a single dose	**General:** 1. Treatment covers both gonorrhea and chlamydia. 2. Future GC Treatment regimens will continue to reflect national recommendations in association with local GC antimicrobial resistance trends (AMR) trends. 3. Retreatment is indicated if the client has missed 2 consecutive doses of doxycycline or has not completed a full 5 days of treatment. 4. Consult physician or NP if client is unable to use cefixime, ceftriaxone, or azithromycin. 5. See BCCDC *STI Medication Handouts* for further medication reconciliation and client information. 6. See Monitoring and Follow-up section for test-of-cure (TOC) requirements. **Allergy and Administration:** 1. DO NOT USE ceftriaxone or cefixime if history of allergy or anaphylaxis to cephalosporins. Consult with or refer to a physician or NP if history of anaphylaxis or immediate reaction to penicillin. 2. DO NOT USE azithromycin if history of allergy to macrolides. 3. DO NOT USE doxycycline if pregnant and/or allergic to doxycycline or other tetracyclines. 4. If an azithromycin or doxycycline allergy or contraindication exists, consult with/refer to a physician or NP for alternate treatment.
Second Choice Cefixime 800mg PO in a single dose AND Doxycycline 100mg PO BID for 7 days OR Ceftriaxone 250mg IM in a single dose AND Doxycycline 100mg PO BID for 7 days	

Third Choice Azithromycin 2gm PO in a single dose	5. Azithromycin and doxycycline are sometimes associated with gastrointestinal adverse effects. Taking medication with food and plenty of water may minimize adverse effects. 6. The preferred diluent for ceftriaxone IM is 0.9ml lidocaine 1% (without epinephrine) to minimize discomfort. 7. DO NOT USE lidocaine if history of allergy to lidocaine or other local anesthetics. Use cefixime PO as alternate treatment. 8. For IM injections of ceftriaxone the ventrogluteal site is preferred. 9. 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 CDC Manual- Chapter 2: Immunization – Part 3: Management of Anaphylaxis in a NonHospital Setting, November 2016. 10. 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. 11. 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. 12. 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. 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: Consult with or refer to an NP or physician if the client: • Has a history of congenital or documented QT prolongation. • Has a history of electrolyte disturbance in particular hypokalemia, hypomagnesaemia. • Has a clinically relevant bradycardia, cardiac arrhythmia or cardiac insufficiency. • Is on any of the following medications:

Treatment	Notes
	○ Antipsychotics: pimozide (Orap®), ziprasidone (Zeldox®) ○ Cardiac: dronedarone (Multaq®) ○ Migraine: dihydroergotamine (Migranal®), ergotamine (Cafergot®)

Pregnant or Breast-/Chest-Feeding Adults

For all pregnant or breast-/chest-feeding clients, consult with or refer to a physician or NP.

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 DST 901: Care and Treatment Plan: Treatment of STI Contacts).

Monitoring and Follow-up

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

Potential Complications

- Pelvic inflammatory disease (PID)
- Infertility
- Ectopic pregnancy
- Chronic pelvic pain
- Sexually-acquired reactive arthritis
- Disseminated gonococcal infection (DGI)

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.
- The appropriate use of medications (dosage, side effects, and need for re-treatment if dosage not completed, or symptoms do not resolve).
- Harm reduction (condom use significantly reduces the risk of transmission).
- Cleaning sex toys between use and using condoms if sharing sex toys.
- The benefits of routine STI screening.
- The potential complications of untreated cervicitis.
- Co-infection risk for HIV when another STI is present.
- The asymptomatic nature of STI.
- The importance of revisiting a health care provider if symptoms persist.

Consultation and/or Referral

Consult with or refer to a physician or NP in the following situations:

- Assessment indicates PID
- HSV infection is suspected
- Syphilis infection is suspected
- Client is pregnant and/or breast-/chest-feeding
- Recurrent MPC is suspected
- Symptoms persist following MPC treatment completion

Documentation

- MPC is not reportable
- As per agency policy

References

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

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