DST-1011 Trichomoniasis

DEFINITION

Infection caused by the transmission of *Trichomonas vaginalis* (*T. vaginalis* or TV) during sexual contact in which body fluids are exchanged.

CAUSE

Protozoan: *Trichomonas vaginalis*

PREDISPOSING RISK FACTORS

- sexual contact where there is transmission through the exchange of body fluids

TYPICAL FINDINGS

Sexual Health History

- sexual contact with at least one partner
- sexual contact with someone with confirmed positive laboratory test for STI

Physical Assessment

- generally asymptomatic
- vaginal and/or urethral irritation
- abnormal change in vaginal discharge (frothy, whitish yellow in colour)
- painful (dysuria) or difficult urination
- vulvar erythema
- cervical erythema ("strawberry cervix")
- pH greater than (>) 4.5 (not applicable after vaginoplasty)

DIAGNOSTIC TESTS

Full STI screening is recommended. See the *STI Assessment DST*.

Diagnostic testing is not available for men unless specifically called into the BCCDC Public Health Laboratory (BCCDC PHL) by an ordering physician or nurse practitioner (NP). For transgender clients, some laboratories in British Columbia will accept specimens if "transgender client" is indicated on the requisition. There are currently no provincial recommendations for routine trichomoniasis screening in BC. Screening should be offered to all clients with vaginal symptoms and considered in high prevalence populations.

Diagnostic tests used for trichomoniasis will depend on the lab testing platform and/or workplace guidelines and may include the following:

- trichomoniasis NAAT vaginal swab
- trichomoniasis NAAT urine
- trichomoniasis C&S vaginal swab
- trichomoniasis antigen vaginal swab
- wet-mount microscopy

CLINICAL EVALUATION/CLINICAL JUDGMENT

Treat all clients with confirmed trichomoniasis by positive laboratory result. May treat based on microscopy results if trichomoniasis is identified on wet-mount.

MANAGEMENT AND INTERVENTIONS

Goals of Treatment

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

TREATMENT OF CHOICE

Treatment	Notes
First Choice	**General:**
metronidazole 2 gm PO in a single dose	1. Clients treated with metronidazole 500 mg PO BID for 7 days for presumptive bacterial vaginosis (BV) clinical management at the time of assessment and testing; do not require further treatment with metronidazole if the diagnostic test results are positive for trichomoniasis.
Alternate Treatment	**Allergy and Administration:**
metronidazole 500 mg PO BID for 7 days	1. Alcohol must be avoided 12 hours pre-treatment, during treatment and 24-48 hours post-treatment with metronidazole. 2. Metronidazole 500 mg PO BID for 7 days is acceptable and safe to administer in breast-/chest-feeding clients. Consult/refer for other first choice or alternate treatment recommendations in pregnant clients.

PREGNANT OR BREAST-/CHEST-FEEDING CLIENTS

For clients who are pregnant, consult with or refer to physician or NP. For clients who are breast-/chest-feeding, metronidazole 500 mg PO BID for 7 days is acceptable and safe to administer.

PARTNER COUNSELLING AND REFERRAL

People who have confirmed laboratory test for trichomoniasis should notify all the people who may have been exposed through sexual contact in the previous 60 days. If no sexual contact in the previous 60 days then the client should notify their last sexual contact (see *Treatment of STI Contacts DST*).

MONITORING AND FOLLOW-UP

Clients who continue to experience symptoms, and have not been re-exposed to an untreated partner after completing treatment, should be referred to a physician or NP.

POTENTIAL COMPLICATIONS

- infertility or lower sperm count in men
- premature rupture membranes in pregnant clients

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.
- all sexual partners within the last 60 days require treatment; testing and treatment is indicated for contacts with vaginas; if no sexual partners within the past 60 days, the last sexual partner requires follow-up for treatment and testing if appropriate.
- the appropriate use of medications (dosage, side effects, and need for re-treatment if dosage not completed, or symptoms do not resolve).
- special precautions for taking metronidazole: avoid alcohol 12 hours prior to starting treatment, during the course of treatment and for 24-48 hours after treatment completion.
- 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 trichomoniasis.
- co-infection risk for HIV when another STI is present.
- the asymptomatic nature of STI.

CONSULTATION AND/OR REFERRAL

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

- are pregnant
- are allergic to metronidazole
- have persistent symptoms after receiving treatment with no re-exposure to untreated partner(s)
- is unable to abstain from alcohol during recommended treatment period

DOCUMENTATION

- trichomoniasis is not reportable
- as per agency policy

REFERENCES

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.

Bell, C., Hough, E., Smith, A. & Greene, L. (2007). Targeted screening for Trichomonas vaginalis in women, a pH-based approach. *International Journal of STD & Aids*, (18), pp.402-403.

British Association for Sexual Health and HIV (BASHH). (2014). United Kingdom national guideline on the management of Trichomonas vaginalis*. BASHH Guidelines*.

British Columbia Centre for Disease Control (BCCDC). (2011). Safe Use of 10% Potassium Hydroxide in STI Screening. In: *BCCDC Communicable Disease Manual: Chapter 5*.

BCCDC. (2014). *British Columbia treatment guidelines: Sexually transmitted infections in adolescent and adults*.

Centers for Disease Control and Prevention (CDC). (2015). Trichomoniasis - diseases characterized by vaginal discharge. In: *2015 Sexually Transmitted Diseases Treatment Guidelines.*

Coleman, J.S., Gaydos, C.A. & Witter, F. (2013). *Trichomonas vaginalis*: Vaginitis in obstetrics and genecology practice: New concepts and controversies. *Obstet Gynecol Surv*, 68(1), pp.43-50.

Hegazy, M.M., El-Tantawy, N.L., Soliman M.M., El-Sadeek, E.S. & El-Nagar, H.S. (2012). Performance of rapid immunochromatographic assay in the diagnosis of *Trichomonas vaginalis*. *Diagnostic Microbiology Infectious Disease*, 74(1), pp.49-53.

Helms, D. J., Mosure, D. J., Metcalf, C. A., Douglas, J. M., Malotte, C. K., Paul, S. M. & Peterman, T.A. (2007). Risk factors for prevalent and incident *Trichomonas vaginalis* among women attending three sexually transmitted disease clinics. *Sexually Transmitted Diseases*, 5(35), pp.484-488.

Holmes, K., Sparling, P., Stamm, W., Piot, P., Wasserheit, J., Corey, L., Cohen, M. & Watts, H. (2008). *Sexually transmitted diseases* (4th ed). Toronto: McGraw Hill Medical.

Huppert, J.S., Joel, E., Mortensen, J.L., Reed, J.K., Kimberly, D., William, R., Miller, C. & Hobbs, M. (2007). Rapid antigen testing compares favourably with transcription-mediated amplification assay for the detection of *Trichomonas vaginalis* in young women. *Clinical Infectious Diseases*, (45), pp.194-198.

Klebanoff, M.A., Carey, J.C., Hauth, J.C., et al. (2001). Failure of metronidazole to prevent preterm delivery among pregnant women with asymptomatic *Trichomonas vaginalis* infection. *N Engl J Med*, 345, pp.487–493.

Public Health Agency of Canada (PHAC). (2010). Section 4 - Management and treatment of specific syndromes. Vaginal discharge (bacterial vaginosis, vulvovaginal candidiasis, trichomoniasis). In: *Canadian Guidelines on Sexually Transmitted Infections*.

PHAC. (2014). Supplementary statement for recommendations related to the diagnosis, management, and follow-up of vaginal discharge: March 2014. In: *Canadian Guidelines on Sexually Transmitted Infections*.

Weyers, S, Verstraelen, H., Gerris, J., Monstrey, S., Lopes Santiago, G.S., Saerens, B., Verhelst, R. (2009). *Microflora of the penile skin-lined neovagina of transsexual women*. *BMC Microbiology,* 9(102), p. 1-10.

Verteramo, R., Calzolari, E., Degener, A.M., Masciangelo, R. & Patella, A. (2008). *Trichomonas vaginalis* infections: risk indicators among women attending for routine gynaecologic examination. *Japan Society of Obstetrics and Gynecology*, 2(34), pp.233-237.