West of Scotland Sexual Health Managed Clinical Network

NHS Ayrshire & Arran | NHS Dumfries & Galloway | NHS Forth Valley | NHS Greater Glasgow and Clyde | NHS Lanarkshire

West of Scotland Guideline ***Approved May 2023***

TRICHOMONAS VAGINALIS

What's New:

Recommended treatment is 7 day course of metronidazole. Stat dose has a higher rate of treatment failure.

Introduction

Trichomonas vaginalis (TV) is a flagellated protozoan that is a parasite of the genital tract.

Due to site specificity, infection almost always follows direct inoculation of the organism (intravaginal or intraurethral) and is thus almost exclusively sexually transmitted.

Note: there are other species of Trichomonas which are not sexually transmitted, eg, Trichomonas Faecalis, so it is therefore important to clarify this with the testing laboratory if further differentiation is required.

In adult female cases urethral infection is present in 90% of episodes, although the urinary tract is the sole site of infection in <5% cases.

In men infection is usually of the urethra.

The most obvious host response to infection is a local increase in polymorphs.

Infection is associated with an increased risk of HIV transmission.

There is a spontaneous cure rate in the order of 20/25%.

TV should be managed in local specialist sexual health services or in consultation with.

This guidance is aimed primarily at people aged 16years or older.

Females - Symptoms (10-50% asymptomatic)

Vaginal discharge
Itch
Dysuria
Burning
Occasionally lower abdominal discomfort or vulval ulceration

Females – Signs (5-15% *nil abnormal* on examination)

Erythema – vaginitis and vulvitis
Discharge – in up to 70%. The classical frothy yellow discharge is seen in 10-30% of females.
Odour
2% "strawberry" cervix visible to the naked eye

Males - Symptoms (15-50% asymptomatic; Often present as contacts of infected female partners)

Urethral discharge
Dysuria
Frequency

Males – Signs

Urethral discharge
Rarely balanoposthitis

Diagnosis

It is important to check with your local laboratory if they have facilities for culture of TV and how to request this is done. Some laboratories will do microscopy alone for TV.

Females – Investigations

- **Vaginal pH** – Use a swab/loop to collect discharge from the lateral vaginal wall and put it on narrow range pH paper (range 3.8-5.5). TV is associated with an elevated vaginal pH of > 4.5
- **IMMEDIATE microscopy** (where available) Sensitivity 45-60%
  - Wet mount preparation (normal saline) from posterior vaginal fornix
  - Read within 10 minutes of collection – motility decreases with time
  - Direct observation of trichomonas
- **Where IMMEDIATE microscopy is not available:**
  - The diagnosis may be made provisionally if there is profuse frothy discharge, vaginitis and a raised pH
- **HVS** (from posterior fornix) should arrive in the lab within 6 hours
- **Culture of TV** Specific culture media will diagnose up to 95% cases
- **Point of care tests** are available. False positives may occur especially in populations of low prevalence – consider confirming positives in this situation
- **Nucleic acid amplification tests (NAATS)** are available for diagnosis of TV. These offer the highest sensitivity. These should be the test of choice where resources allow
- Offer full STI testing

NB: Be aware that TV diagnosed on Liquid based cytology may have a false positive rate. If TV-like organisms are reported via SCCRS, a letter is generated via the results service requesting the woman to attend to confirm infection prior to any treatment and/or partner notification.

Males - Investigations

In practice, treatment is usually epidemiological without identification of the organism, which is difficult - highest yield is from centrifuged first void urine deposit.

- **Microscopy of urethral smear** in saline gives a diagnosis in 30% of infected males
  - If there is an excess of polymorphs on initial microscopy, repeat urethral smear after TV treatment is complete. This will allow a separate diagnosis of Non-specific urethritis
- Doing both a urethral swab culture (using specific culture media) and a culture of first void urine can increase the diagnostic rate (urine should not be refrigerated and ideally should be centrifuged within an hour)
- **Nucleic acid amplification tests (NAATS)** are available for diagnosis of TV. These offer the highest sensitivity. These should be the test of choice where resources allow.
- Offer full STI testing

Management (95% response)

Treat partners simultaneously irrespective of test results
Note spontaneous cure rate in the order of 20-25%.

Preferred treatment: Metronidazole 400-500mg twice daily for 5-7 days

Alternative treatment: Metronidazole 2g stat (stat dose has a higher risk of treatment failure)
*Advise to avoid alcohol for the duration of treatment and for **48** hours afterwards with Metronidazole*

- Clients should be advised to avoid sexual intercourse (including oral sex) for at least 1 week until they and their partner(s) has completed treatment and follow-up
- Give detailed information about the condition. The following is a link to the BASHH Patient information leaflet:

https://www.bashhguidelines.org/media/1326/tv_pil_mobile-pdf_04.pdf

Partner Notification

- All clients diagnosed with TV should see a sexual health specialist who has achieved sexual health advisor competencies
- Current sexual partners **should be treated** for TV and offered testing for STIs regardless of the results of their tests
- Epidemiological treatment for partners is as above
- Any partner(s) within the 4 weeks prior to presentation should be treated

Female - Follow Up

- Telephone consultation at 2 weeks with a sexual health specialist with sexual health advising competencies to check compliance, when they last had sex, and if they have any ongoing symptoms
- If still symptomatic, arrange a test of cure. Optimum timing is 4 weeks after start of treatment
- Complete Partner Notification
- Ensure offered/ arranged testing for HIV and Syphilis taking into account relevant window period and risk exposure

Male - Follow Up

- Telephone consultation at 2 weeks with a sexual health specialist with sexual health advising competencies to check compliance, when they last had sex, and if they have any ongoing symptoms
- If there was an excess of polymorphs on initial urethral microscopy repeat this at follow up to ensure a diagnosis of non-specific urethritis has not been missed
- If still symptomatic, arrange a test of cure. Optimum timing is 4 weeks after start of treatment
- Complete Partner Notification
- Ensure offered/ arranged testing for HIV and Syphilis taking into account relevant window period and risk exposure

Recurrent / Relapsing TV

May be due to inadequate therapy, re-infection or resistance.

1 Confirm partner(s) has been treated and that they have abstained from sexual contact
2 Check compliance with therapy and exclude vomiting from metronidazole
3 Once re-infection and non-compliance has been excluded:

1. **Repeat course of Metronidazole** – 400-500 mg twice daily for 7 days
2. **For patients failing 1. Try Metronidazole** 2g daily orally for 5 to 7 days or 800mg TID for 7 days

If patient fails on the above 2 options discuss with a senior colleague in GUM before considering alternative options

TV and Pregnancy

See WOS STI in Pregnancy Guideline

References

1. UK national guideline on the management of Trichomonas Vaginalis (2021) BASHH – last accessed May 2023
2. European (IUSTI/WHO) guideline on the management of vaginal discharge,2018 – last accessed May 2023