Trichomonas vaginalis infections

Microorganism

- ***Trichomonas vaginalis***, an anaerobic flagellated protozoan parasite
- **Exclusively human** pathogen
- Trichomoniasis is the **most common non-viral sexually transmitted infection (STI)** in the world
- *T. vaginalis* is highly sensitive to desiccation and temperature variations → the sample must be transported quickly and at room temperature to the laboratory.
- *T. vaginalis* infection may increase the risk of HIV transmission

Transmission

- Contamination occurs exclusively through **sexual contact.**

Incubation

- The incubation period is **poorly defined**, ranging from a few days to 4 weeks.

Clinical presentation

Women	• **Asymptomatic** infection in approximately **25%** of cases
	• Symptomatic presentations: vaginitis
	  o Profuse, frothy, malodorous yellowish or greenish vaginal discharge
	  o +/- vulvar and/or vaginal pruritus
	  o +/- dyspareunia or dysuria
	• Possible complications:
	  o Infertility
	  o Miscarriage
	  o Premature birth
	  o Neonatal hypotrophy

Men	• **Asymptomatic** infection in more than **50%** of cases • Symptomatic presentation: urethritis or balanitis, often with mild symptoms

Diagnosis

Gender	Samples	Methods
♀	• Vaginal swab • Vaginal self-sampling	• Direct examination (wet mount microscopy) • Immunochromatographic test • Nucleic acid amplification test (NAAT), e.g. PCR, TMA (not reimbursed)
♂	• First-void urine • Urethral discharge collection	

→ A comprehensive assessment for bacterial and viral STIs is strongly recommended, including testing for HIV, hepatitis B, syphilis, *Chlamydia*, gonorrhea, etc.

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Treatment

- Treatment is based on antimicrobials from the imidazole family, administered as follows:

1st line	• Metronidazole PO 500mg twice daily → 7 days • If compliance is a concern, a single-dose oral treatment may be considered: metronidazole 2 g or secnidazole 2 g
2nd line	• Repeat treatment with oral metronidazole 500mg twice daily → 7 days
3rd line	• Seek specialist opinion to assess for potential resistance to azoles or non-compliance

- In case of azoles allergy, the treatment is local:

Azole allergy	• Boric acid ovule 600mg twice daily → 7 days • Paromomycin intravaginal cream (6.25%) twice daily → for 7 days (off-label use)

- In case of suspected azoles resistance, after specialist consultation, consider the following strategies:

Azole resistance	• Metronidazole PO 1g twice daily → 7 days • Tinidazole PO 2 to 3 g daily → for 7 days • Tinidazole ovule 500 mg twice daily → for 7 days • Boric acid ovule 600mg twice daily → for 7 days • Paromomycin intravaginal cream (6.25%) twice daily → 7 days (off-label use)

[a] require compounding, as commercial preparations may not be available

- **Systematic** treatment of sexual partners is recommended, regardless of their test results.
- Additional measures
  - Avoid alcohol consumption during azole treatment due to the risk of a disulfiram-like reaction (antabuse effect)
  - Sexual abstinence is advised until the completion of treatment for both the patient and their partner

Follow-up

- Healing is assessed on the improvement of symptoms.
- Microbiological testing of cure is not routinely recommended.

Prevention

- Prevention strategies are similar to those for other STIs and are part of a **combined prevention approach**:
  - Risk reduction counseling,
  - Uses of protective equipment such as condoms…
  - Vaccinations against STIs as recommended (hepatitis A, hepatitis B, papillomavirus)
  - Other prevention measures such as HIV pre-exposure prophylaxis (PreP) and screening for bacterial and viral STIs

- There is no specific screening recommendation for *T. vaginalis* infection to date.

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