Trichomoniasis
Clinical Guidelines: Sweden

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Background and clinical manifestations

Due to the increased use of antibiotics against anaerobic bacteria trichomoniasis is a rare disease in Sweden.

The protozoon *Trichomonas vaginalis* mainly causes vaginitis, and more seldom urethritis in men. Symptoms are non-specific and similar to other genital infections. Almost 50% of infections are without symptoms. Infection in women also affects the urethra and the paraurethral glands. Most women with trichomoniasis fulfil the criteria of bacterial vaginosis.

Diagnostics

Indications

Since wet-smear microscopy is so simple it should be performed in all examined women and particularly in those with symptoms. The sensitivity of microscopy is almost 70%. Considering the present epidemiological situation, this is satisfactory.

Sampling

The vaginal sample is collected from the fornix and the vaginal wall (avoiding cervical mucus) and is mixed with saline (at room temperature, since if the saline is cold the protozoa lose their mobility).

Laboratory diagnostics

The sampling procedure is the same. When culture is needed the local laboratory should be contacted.

Treatment

Indications for treatment

All trichomonal infections are treated systemically. When the patient fulfils the criteria of bacterial vaginosis treatment is given (metronidazole 500 mg × 2 × 7 days or equivalent).

Uncomplicated infection

Standard treatment is single-dose metronidazole 2 g. Single-dose tinidazole is equivalent but more expensive.

In case of hypersensitivity there is no satisfactory alternative.

Complicated infection

In case of recurrence consider: compliance; re-infection; and resistance.

A recurring patient might respond to another standard treatment.

If treatment failure persists, higher dose is used for a longer time, e.g. 2 g metronidazole daily for 2–3 days or 400–500 mg × 3 × 7 days.

Pregnancy

There is no consensus if metronidazole is teratogenic during the first trimester, but current opinion among Swedish obstetricians is that it should be avoided.

Metronidazole is excreted in breast milk, but therapeutic doses are unlikely to affect the child. There are recommendations to interrupt breast-feeding for 12–24 h. Tinidazole should not be used during breastfeeding.

There are reports of successful treatment with clotrimazole, which can be used during pregnancy as well as during breast-feeding. Spontaneous cure is reported. Infections in late pregnancy should be treated due to the risk of complications.

Follow-up

Routine follow-up is not called for.

Notification and contact tracing

Partners should always be treated, but also offered regular examination. There should be no partner treatment without examination.

Infections with *T. vaginalis* are not reported to the Institute for Communicable Disease Control.

Comments on the Guidelines – Edited by Tomas Norman Dam

Specific comments to this guideline were given by Helle Kielberg Larsen, Harald Moi and Olle Larko. The comments have been compiled into a summary edited and commented by CME editor Tomas Norman Dam. Further comments to the guidelines from Forum readers can be mailed to cme@medicaljournals.se and will be presented open for discussion in the next issue of the CME section.

General comments and comments on the recommended treatments

The guidelines recommendations are well in agreement with Danish, and Norwegian guidelines (available online at http://www.helsebiblioteket.no/microsite/Antibiotikaretningslinjer).

Specific comments were made from Helle Kielberg Larsen (Bispebjerg Hospital, Denmark):

1. *Incubation* period is not mentioned in the Swedish guideline. In our guideline it is 4–28 days.

2. *Symptoms and clinical presentation*: In the Danish guideline we include in the symptoms and clinical presentation that trichomoniasis can be asymptomatic (10–50%). Women will, if symptomatic, often have abundant, yellow-green vaginal discharge, with vulvar irritation, and can also have dysuria. Men can have urethritis.

3. *Treatment*: I agree with the standard treatment for uncomplicated infections: metronidazol tablets 2 g as a single dosis regimen, and tinidazol tablets 2 g as an alternative choice (in Denmark we need a special approval from the Danish medicines agency to order tinidazole). And for complicated infections I agree to exclude reinfection or resistance. But in this situation we first recommend a regimen of metronidazole tablets 500 mg × 2 × 7days, and if this fails then metronidazole tablets 2 g daily for 5 days. If this fails we recommend tinidazol tablets 2 g daily for 5 days, in accordance with "CDC STD guideline 2010; Trichomoniasis"

4. *Pregnancy and metronidazole/tinidazole*: I do not agree that metronidazol cannot be used during the first trimester of pregnancy. The Danish society for obstetrics 2010 guideline for gynaecological infections, The Danish drug information: pro-medicin.dk, 2011 European (IUSTI/WHO) Guideline on the Management of Vaginal Discharge and CDC STD guideline 2010 on Trichomoniasis, all conclude that thousands of pregnant women have been exposed to metronidazol, and that increased risk of theratogenicity or mutagnicity have not been demonstrated in multiple studies and metaanalysis, so metronidazole can be used in all stages of pregnancy and during breastfeeding, however high dose regimens are best avoided in these circumstances. Withholding breastfeeding during treatment and for 12–24 h after last dose will reduce the exposure of metronidazole to the infant. I agree that tinidazole should not be given during pregnancy or breastfeeding.

5. *Cave*: There should be a remark on the potential alcoholintolerance during treatment with metronidazole.