Interventions for trichomoniasis in pregnancy

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An updated version of this systematic review has been published and can be found online at www.cochrane.org. We will soon update the below RHL summary to reflect the updated findings of the systematic review.

Metronidazole is effective against trichomoniasis during pregnancy, but it may increase the risk of preterm birth. The intervention is clearly feasible in under-resourced settings as metronidazole is relatively inexpensive and available as a generic product.

RHL Commentary by Walker G

1. EVIDENCE SUMMARY

The Cochrane review found that metronidazole is effective against trichomoniasis during pregnancy yielding parasitological cure rates of around 90%; however, the drug may increase the risk of preterm birth.

Two trials with 842 women were identified. One trial carried out in the United States enrolled 617 asymptomatic women at between 16 and 23 weeks of gestation. Two grams of metronidazole was given at entry into the trial and 48 hours later, and then again after 14 days. This trial was stopped because metronidazole was found not to be effective in reducing preterm birth, and might even have increased it, in spite of achieving a high rate of parasitological cure. The second trial, carried out in South Africa, enrolled 376 women with more advanced pregnancy and with symptoms of trichomoniasis. One dose of 2 g metronidazole was used. This trial also showed high rate of parasitological cure but no discernible clinical effect on clinical outcomes.

Overall, the findings indicate that metronidazole is an effective treatment for symptomatic and asymptomatic trichomoniasis in pregnant women, but may be associated with increased risk of preterm delivery (relative risk: 1.8; 95% confidence interval: 1.2-2.7).

All adequately controlled trials which could be identified were included and analysed appropriately.

2. RELEVANCE TO UNDER-RESOURCED SETTINGS
2.1. Magnitude of the problem

Trichomonas vaginalis, with prevalence rates of 15% or higher in developing countries particularly where access to health care is limited. Consequently, it is likely that up to 25 million pregnant women globally are infected with trichomoniasis.

2.2. Applicability of the results of the Cochrane Review

The use of metronidazole as a treatment for trichomoniasis is applicable in all settings (1). The intervention is clearly feasible in under-resourced settings: metronidazole is relatively inexpensive and available as a generic product. However, in view of the different treatment approaches used in the two trials included in the review, it would seem reasonable to restrict the treatment of trichomoniasis in pregnant women to those who show symptoms of infection and are over 30 weeks of gestation.

In parts of the world with a high prevalence of HIV infection and the likelihood that infection with trichomoniasis might facilitate HIV transmission, it is particularly important to treat pregnant women with symptoms of Trichomonas vaginalis infection.

2.3. Implementation of the intervention

Health workers first need to be trained to treat all non-pregnant women who present with symptomatic trichomoniasis—vaginal pruritus/irritation or discharge. It is desirable to confirm the presence of infection by microscopic examination of a wetmount smear. Partners of infected women should also be treated Strategies for partner notification for sexually transmitted diseases. In the case of pregnant women, health workers should be trained to treat women with symptoms of trichomoniasis infection late in pregnancy (i.e. over 30 weeks of gestation), with, where possible, the diagnosis having been confirmed microscopically. Health workers should emphasise the importance of using condoms to reduce the transmission of trichomoniasis and other sexually transmitted infections, including in pregnant women.

3. RESEARCH

Data from epidemiological studies indicate that trichomoniasis infection is a risk factor for preterm birth. However, even though treatment with metronidazole clears the parasite, it does not seem to reduce preterm births. Studies are needed to clarify whether infection with trichomoniasis is indeed a cause of preterm birth and, if so, why metronidazole while clearing the parasite does not reduce the complications associated with trichomoniasis.

References


