



Worm Infections in PREGNANCY and BREASTFEEDING

Information in this leaflet is general in nature and should not take the place of advice from your health care provider. With every pregnancy there is a 3 to 5% risk of having a baby with a birth defect.

What are Worm Infections?

In Australia, worm infections in humans are usually caused by Threadworm, also commonly known as Pinworm. Threadworms are thin, white rods measuring up to 13 mm in length and look like small cotton threads. Humans are a natural host and worms are found in the intestine^[1].

How are they transmitted?

Threadworms enter the body when the threadworm eggs are swallowed. The eggs may be carried to your mouth by contaminated food, drink or your fingers. Once swallowed, the eggs hatch in the intestines and mature into adult worms. After about 4 weeks, the female threadworm travels to the anus where she lays her eggs on the surrounding skin during the night^[1]. This often leads to anal itching in the host. Scratching the itchy area transfers the eggs to under the fingernails which are then transferred to other surfaces and/or foods. Rarely, in women, the parasite may travel from the anal area to the vagina and into the uterus, fallopian tubes and the area around the pelvic organs causing inflammation^[1,2]. Threadworm eggs can survive for up to 2 to 3 weeks on inert surfaces. Contrary to popular belief, pets do not spread threadworm, although they may carry different types of worms. There is usually no need for any regular preventative worm treatment in humans.

Symptoms

Some people may be infected but have no symptoms at all. Signs of threadworm infection may include:

- itching of the anal or vaginal area, especially at night
- insomnia or restlessness
- irritability and behavioural changes
- reduced appetite
- feeling unwell
- vaginal pain
- weight loss and low absorption of nutrients (usually associated with a large and long-term infestation)

Diagnosis

The 'Tape test' is commonly used to diagnose threadworm. It involves taking a piece of invisible tape and sticking the adhesive side directly to your anus in different spots when you wake up first thing in the morning (before using the toilet, washing etc). Then place the tape onto a glass slide or specimen container. Do this for 3 days if you can and then take the tapes to your doctor who can look for the eggs under a microscope. Sometimes you can see thin white threads directly on the tape indicating a threadworm infection. Similarly, you can inspect your bowel movement in the toilet bowl to see if you can see any moving thin white cotton thread-like rods^[1,2,3].

Medical treatments in Pregnancy

There are two medications that are commonly used to treat worm infections and they are both available over the counter from a pharmacy. The generic names are **Mebendazole** and **Pyrantel**.



Mebendazole is the first preference as studies in human pregnancy show no increase in adverse effects to the mother or fetus. Pyrantel, conversely, has no human pregnancy data but studies in animals at very high doses showed no increased risk of birth defects^[4]. Both medications are poorly absorbed with most of the medicine eliminated through stool. The treatment is one dose taken orally followed by a second dose taken 2 weeks later if symptoms persist^[5]. The whole family may need to be treated even if they have no symptoms as threadworm infection is considered highly contagious. Both medications are approved treatments for threadworm infection in the 2nd and 3rd trimester of pregnancy by the World Health Organization (WHO)^[1]. A zinc cream or mild antiseptic cream used around the bottom at night and in the morning can help with itching around the anus.

Medical treatments in Breastfeeding

One study of mebendazole in breastfeeding showed the drug was not detectable in breastmilk. Pyrantel has not been evaluated in breastfeeding^[6]. However, both medications have poor oral absorption and few side-effects. At the usual dose, they are therefore unlikely to pose a risk to the baby and can be taken while breastfeeding^[6]. Breastfed babies don't need to be treated with the rest of the family unless they are also infected. Your pharmacist or doctor can advise the recommended dose of medicine for a baby if necessary.

Supportive Treatments

- Wash all sheets, blankets, towels and your clothing and underwear in hot water. Pyjamas and sleepwear should be changed first thing in the morning.
- Daily bathing and shower or washing of the anal area in the morning gets rid of eggs that were laid at night in that area
- Clean fingernails carefully and cut them short (yourself and the whole family).
- Try not to scratch your bottom or vagina
- Toys, countertops, floors and surfaces may need to be washed/scrubbed.
- Carpets need to be vacuumed.
- Disinfect the toilet seat^[1,2,3]

Ask your midwife, doctor or pharmacist for the brand names of these medicines. It is very important that you use as directed, and see your doctor if symptoms do not improve.

References

1. Centers for Disease Control and Prevention, USA. Fact sheet 'Enterobiasis (also known as pinworm infection)' Jan 10 2013 <<http://www.cdc.gov/parasites/pinworm/index.html>>
2. Better Health Channel, Department of Health Victoria. Factsheet 'Worms-pinworms' April 2013 <http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Worms_pinworms>
3. Pharmaceutical Society of Australia. Self-Care Pharmacy Factsheet 'Threadworms' June 2010 <http://www.vpharmacy.com.au/assets/media/health_advice_pdf/gastrointestinal/Threadworms_Oct2011_V2.pdf>
4. Briggs GG, Freeman RK, Yaffe SY. Drugs in Pregnancy and Lactation: A Reference Guide to Fetal and Neonatal Risk 9th edition. Lippincott Williams & Wilkins. Philadelphia, 2011 [online] <<http://ovidsp.tx.ovid.com/sp3.10.0b/ovidweb.cgi?S=MGNIFPFCBADDAMMFNCNKJGLBJPFEEA00&Titles+Display=S.sh.20%7c1>>
5. Rossi S (ed). Australian Medicines Handbook 2013. Australian Medicines Handbook Limited. Adelaide, 2013 [online] <<https://www.amh.net.au.acs.hcn.com.au/online/view.php?page=index.php>>
6. Hale. TW. Medications and Mothers' Milk. 15th ed. Hale Publishing. Amarillo, 2012

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For more information call MotherSafe: NSW Medications in Pregnancy and Breastfeeding Service on 9382 6539 (Sydney Metropolitan Area) or 1800 647 848 (Non-Metropolitan Area) Monday -Friday 9am-5pm (excluding public holidays)