
Pinworms

What are Pinworms?

Pinworms are tiny white worms (*Enterobius vermicularis*) that live in the intestine. They are about the length of a staple. Pinworms are sometimes called threadworms because they look like a piece of white thread.

Who is at risk?

Pinworm infection affects people of all ages and income levels. It occurs most commonly among school-aged children and preschoolers (including those attending child care centres), people living in institutional settings, and household members and caregivers of persons with pinworm infection. Cats and dogs are not involved in the spread of pinworms.

How are pinworms spread?

Pinworm infection is spread by the fecal-oral route, that is by the transfer of infective pinworm eggs from the anus to someone's mouth, either directly by hand or indirectly through contaminated clothing, bedding, food, or other articles like toys.

Pinworms are usually spread from child to child and from an infected child to their family members. When infected children scratch their anus, the pinworm eggs may get onto their hands and under their nails and be spread in this manner. Pinworm eggs can survive on clothing, bedding and toys for more than two weeks. These may be sources of exposure to pinworm infection as well.

What are the symptoms?

Often there are no signs of infection. Itching and scratching around the anus is the most common symptom. In children, disturbed sleep and irritability may also occur.

Diagnosis

The best way to see if a child has pinworms is to examine the anus for worms 2 to 3 hours after the child is asleep. In addition, your health care provider may recommend a "tape test" which involves placing sticky tape on the skin around the anus. The pinworm eggs are picked up by the tape and are identified under a microscope.

Treatment

Most pinworm infections are mild and can be treated with oral medication. After the initial dose, the medication is repeated 2 weeks later to decrease the risk of re-infection. Even if only one member of the family has pinworms, it is important that all household members be treated at the same time. Infected people should shower every morning and thoroughly wash their anal area, as this removes a large amount of the eggs.

Preventing the spread of infection and re-infection

- Thorough handwashing after using the toilet and before eating is the best way to prevent the spread of infection
- The best handwashing techniques includes 6 steps:
 - Wet hands with warm, running water
 - Apply liquid soap
 - Lather hands and scrub for 20 seconds
 - Rinse under running water
 - Dry your hands with paper towels
 - Use the towel to turn off the taps

- Keep nails trimmed short and discourage nail biting and thumb-sucking.
- Discourage scratching of the anal area.
- Daily morning showering removes a large number of eggs. If showering is not possible (ie: with young children), the infected person should bathe while standing to avoid getting contaminated bathwater in the mouth.
- Towels and washcloths should not be shared and should be washed using the hot water cycle and dried on the hot cycle in the dryer.
- Underwear and pajamas should be changed and laundered daily. Bed sheets should be changed and laundered regularly, especially after each treatment. The hot water cycle on the washing machine should be used to wash these items and a hot dryer should be used to dry them. Used linen should not be shaken as eggs can be spread in this manner.
- Eggs are sensitive to light, so open bedroom curtains and blinds during the day.
- Children may be return to child care after treatment has started. Ensure children's nails have been cleaned and trimmed.

For more information call:
Population and Public Health -Disease Control Department at 306-655-4612.

References:

Centers for Disease Control and Prevention (2008). *Pinworm Fact Sheet*. Retrieved February 22, 2010 from www.cdc.gov/NCIDOD/dpd/parasites/pinworm/factsht_pinworm.htm

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