

## PINWORM INFECTION (ENTEROBIASIS)

Pinworm (Enterobrosis) is a benign intestinal disease caused by a short spindle-shaped worm 1/4 -1/2 inches long and whitish color. It may occur in both children and adults and usually infects the whole family. The adult worms reside in the colon of the host and the females deposit hundreds of eggs in the folds of anus usually at night. Symptoms are itching of the perianal region, insomnia, restlessness, enuresis and irritability. In female patients the worms may migrate to the vagina causing itching and white or yellowish discharge. They may also irritate the urethra, giving pain on urination. Diagnosis is made by examining material microscopically for eggs. Diagnosis is made by applying transparent adhesive tape to the perianal region in the morning before bathing or defecating, and then examining it for eggs. Examination should be repeated three or more times before accepting a negative result. Female worms may be found in the feces, and in the perianal area.

The mode of transmission is by direct transfer of the infective eggs by hand from anus to mouth of the same or new host or indirectly by clothing, bedding, food or other articles contaminated by eggs. The life cycle requires four to six weeks to be completed. Eggs become infective within a few hours after being deposited by females and survive less than two weeks outside the host.

### Methods of Control

#### A. Preventive measures:

- 1) Remove sources of infection by treatment of cases.
- 2) Daily morning bathing, with showers (or stand up baths) preferred to tub baths.
- 3) Frequent change to clean underclothing, night clothes, and bed sheets, preferably after bathing.
- 4) Clean/vacuum house daily for several days after treatment of cases.
- 5) Education in personal hygiene, particularly the need to wash hands before eating or preparing food, and to discourage scratching bare anal area and nail-biting. Keep nails short.
- 6) Reduce overcrowding in living accommodations.
- 7) Provide adequate toilets; maintain cleanliness in these facilities.

#### B. Control of patient, contacts, and the immediate environment:

- 1) Concurrent disinfection: change bed linen and underwear of infected person daily with care to avoid dispersing eggs into the air. Eggs on discarded linen are killed by exposure to temperatures of 55 C (131 F) for a few seconds; either boil or use a properly functioning household washing machine. Clean/vacuum sleeping and living areas daily for several days after treatment.
- 2) Investigation of contacts: Examine all members of an affected family.

3) Specific treatment: pyrantel pamoate (Antiminth [R]), mebendazole (Vermox[R]), pyrvinium pamoate (Povan[R]), or piperazine citrate (Antepar[R]). In intensive infections, treatment should be repeated after two weeks; concurrent treatment of the whole family may be advisable if several are infected.

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