

DEFINITION

Scabies is caused by a tiny mite. It is often hard to detect, and causes a fiercely, itchy skin condition. Dermatologists estimate that more than 300 million cases of scabies occur worldwide every year. The condition can strike anyone of any race or age, regardless of personal hygiene.

ETIOLOGY

Scabies is caused by a microscopic mite that burrows in the skin. Within several weeks, an allergic reaction develops causing severe itching; often intense enough to keep sufferers awake all night. It may take up to a month before a person will notice the itching.

Human scabies is almost always caught from another person by close contact. Attracted to warmth and odor, the female mite burrows into the skin, lays eggs, and produces toxins that cause allergic reactions. Newly hatched mites travel to the skin surface, lying in shallow pockets where they will develop into adult mites. If the mite is scratched off the skin, it can live in bedding for up to 24 hours or more.

DIAGNOSIS

The earliest and most common symptom of scabies is itching, especially at night. Little red bumps like hives, tiny bites, or pimples appear. In more advanced cases, the skin may be crusty or scaly.

Scabies prefers warmer sites on the skin such as skin folds, where clothing is tight, between the fingers or under the nails, on the elbows or wrists, the buttocks or belt line, around the nipples, and on the penis. Mites also tend to hide in, or on, bracelets and watchbands, or the skin under rings. In children, the infestation may involve the entire body including the palms, soles, and scalp.

Bacterial infection may occur due to scratching. In many cases, children are treated because of infected skin lesions rather than for the scabies itself. Although treatment of bacterial infections may provide relief, recurrence is almost certain if the scabies infection itself is not treated.

Crusted (Norwegian) Scabies

Crusted scabies is a form of the disease in which the symptoms are far more severe. Large areas of the body, like the hands and feet, may be scaly and crusted. These crusts hide thousands of live mites and their eggs, making treatment difficult because medications applied directly to the skin may not be able to penetrate the thickened skin. This type of scabies is extremely infectious and occurs mostly among the elderly, in some AIDS patients, or in people whose immunity is decreased.

Who is most at risk?

Scabies is most common in those who have close physical contact with others, particularly children, mothers of young children, sexually active young adults, and elderly people in nursing homes.

TREATMENTS

Getting rid of the mites is critical in the treatment of scabies. Everyone in the family or group, whether itching or not, should be treated at the same time to stop the spread of scabies. This includes close friends, day care or school classmates, or nursing home residents. Bedding and clothing must be washed or dry cleaned.

PERMETHRIN: Five percent permethrin cream is applied to the skin from the neck down at bedtime and washed off the next morning. Dermatologists recommend that the cream be applied to cool, dry skin over the entire body (including the palms of the hands, under finger nails, soles of the feet, and the groin) and left on for 8 to 14 hours. A second treatment one week later may be recommended. Side effect of 5% percent permethrin cream includes mild temporary burning and stinging. Lesions heal within four weeks after the treatment. If a patient continues to have trouble, reinfestation may be a problem requiring further evaluation by the dermatologist.

LIDANE: One percent lindane lotion is applied from the neck down at night and washed off in the morning. It may be reapplied one week later. Lindane should not be used on infants, small children, pregnant or nursing women, or people with seizures or other neurological diseases, and has been banned in the state of California.

OTHER: Ten percent sulfur ointment and crotamiton cream may be used for infants. Ivermectin is an oral medicine which may be prescribed for the difficult to treat crusted form. It is not to be used in infants or pregnant women.

Antihistamines may be prescribed to relieve itching, which can last for weeks, even after the mite is gone.

Successful eradication of this infestation requires the following:

- See a dermatologist as soon as possible to begin treatment. Remember, although you may be disturbed at the thought of bugs, scabies is no reflection on your personal cleanliness.
- Treat all exposed individuals whether obviously infested or not. Incubation time is 6-8 weeks so symptoms may not show up for a while. If you do not treat everyone, it is as if you were never treated.
- Apply treatment to all skin from neck to legs. This includes between toes, the crease between the buttocks, etc. If you wash your hands after application, you need to reapply the medication to your hands.
- Wash clothes. Do all the laundry with the hottest water possible. Items you do not wish to wash may be placed in the dryer on the hot cycle for 30 minutes, or pressed with a warm iron. Items may be dry-cleaned.
- Items may also be placed in a sealed plastic bag and placed in the garage for two weeks. If the mites do not get a meal within one week, they die.
- Change the bedding.
- Carpets or upholstery should be vacuumed through the heavy traffic areas. Vacuum the entire house and discard the bag, just to be on the safe side.
- Pets do not need to be treated.

Additional Information:

CDC - <http://www.cdc.gov/parasites/scabies/index.html>

Nemours Foundation - <http://www.kidshealth.org/parent/infections/skin/scabies.html>

American Academy of Dermatology - <http://www.aad.org/skin-conditions/dermatology-a-to-z/scabies>