Scabies

Scabies is a parasitic skin infectious disease caused by tiny mites (Sarcoptes scabiei var. hominis). Skin lesions are caused by an immune response to the mite and its secretions (saliva, faeces, eggs).

Incubation period

In people who are infected for the first time, signs of the disease appear within 2–6 weeks after infection, and in those who have already had scabies within a few days after infection (1–4 days).

Transmission

Scabies is mainly transmitted through close body contact (skin-to-skin), prolonged hand holding, sleeping in the same bed or sexual contact. Transmission by casual contact such as shaking hands or hugging does not usually pose sufficient a risk to cause infection.

Transmission indirectly through the use of laundry, towels or bed linen is less likely, but possible in patients with crusted scabies, which is highly infectious due to the large number of mites.

Susceptibility to infection

Anyone can get scabies. They are more common where there is a high density of occupants and where conditions for maintaining personal hygiene, laundry hygiene and bedding hygiene are lacking. It is estimated that 300 million people worldwide are infected with scabies each year.

In Slovenia, the highest number of scabies cases reported in the last ten years was in 2002 (587) and the lowest in 2012 (263).

In 2008, a scabies outbreak was reported among residents of student residencies in Ljubljana. 18 cases were reported in students, and one case in a person employed in a student residence. The second largest outbreak was in 2010, in which 68 residents and staff from a care home for the elderly fell ill.

After the initial infection, a healthy person gradually develops an immune response that affects the number of mites in the skin.

People who have a disturbed immune response do not control the infection and develop crusted (Norwegian) scabies with large number of mites in the skin and severe skin lesions. This form of scabies occurs mainly in the elderly, in some patients with AIDS, lymphoma, T-cell leukaemia, after transplantation, and in people who have reduced immunity due to underlying disease or treatment.

Symptoms

The first important sign of infection is usually itching, which appears suddenly and is pronounced at night or when the patient is warm. In some people, itching does not occur (very old people, babies).

Skin lesions are mainly found where the skin is soft and thin (between the fingers, insider of the wrist, elbow, knees, around the belly button, etc.).

The lesions are in the form of pink papules about the size of millet, with a scab on top. They are usually two and two together, representing the beginning and the end of the burrow. Scratching causes scratches, tiny bubbles and redness on the skin. The lesions are usually symmetrical on the outer sides of the body, there is never a rash in the centre of the chest or back.

In babies and young children, the whole skin can be affected, even the face, neck, scalp and ears.

Crusted scabies (Scabies crustose or Norwegian scabies) occur in very old and immunocompromised people. The scabs contain large number of live mites and eggs.

Infectious period

Patients are infectious before a rash develops, usually 2-6 weeks before itching and rash.

Treatment

The disease is usually recognised by changes in the skin and accompanying phenomena (sudden onset of itching at night, skin changes, location of the rash). Epidemiological data on the occurrence of similar skin lesions in family members or close contacts of the patient are also important.

The diagnosis is confirmed by microscopic examination of skin scrapings for eggs, adult mites or faeces.

For common scabies, products containing scabicides (mite killers) applied to the skin are usually sufficient. Apply the cream or lotion on the skin from the neck to the toes. The ointment should not be applied to the skin immediately after a warm bath, as there is greater systemic absorption and the effect is reduced locally.

The ointment should be reapplied after each washing.

In atypical or Norwegian scabies, topical treatment alone is usually not effective enough, as ointment applied directly to the skin does not penetrate thickened skin and scabs. In these cases, topical treatment is combined with system treatment, usually prescribed by a dermatologist.

Prevention

The whole team where the scabies has appeared must be treated, and measures must be taken by all to prevent further transmission.

After the first application of the medicine to the skin of a sick person, all clothes, towels and bed linen should be washed in a washing machine. Store laundry that cannot be washed in plastic bags for at least 72 hours, during which time the mites will die. Furniture covered with textiles should be left unused for at least 24 hours, then vacuumed, and those that can be wet-cleaned should be cleaned with water and detergent.

Additional information:

• Information leaflet