

SCABIES

1. What is Scabies?

Scabies is a skin infestation by mites that is characteristically very itchy.

2. What causes Scabies?

This condition is caused by the **scabies mite** (*Sarcoptes scabiei var hominis*), which is a very small parasite that is about the size of a pinhead. These mites make tunnels in the upper layer of the skin called the stratum corneum. The female mite then lays eggs in the tracks of these tunnels. Sometimes the tunnels are visible and you may be able to appreciate them as fine lines on your skin.

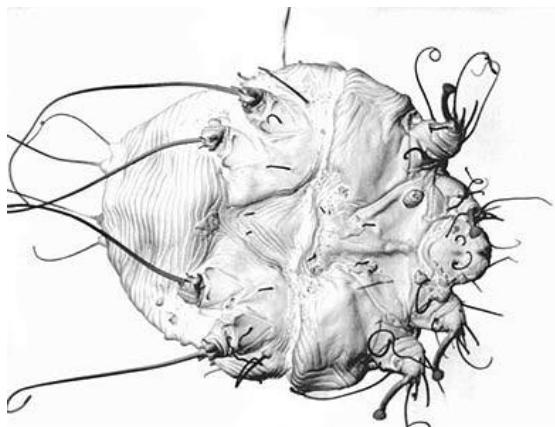


Fig 1: Scabies mite (*Sarcoptes scabiei var hominis*)

3. How does Scabies spread?

Scabies is usually **spread by skin-to-skin contact** with a person who has scabies. It is frequent among children and people who live in close proximity to each other e.g. in hostels or nursing homes. Family members and close contacts of infested individuals may also be affected due to the highly infectious nature of this disease. Scabies can also be acquired through sexual contact.

Because a newly infected person does not begin to itch until **2 to 6 weeks** after being infested, and may have little or no visible rash, the infestation is passed on easily and unintentionally. Individuals who have been previously infested with scabies usually develop symptoms within 1 to 5 days of re-exposure.

The mites can survive on sheets, towels and clothes, but not for very long. It's possible to catch scabies from clothes, towels and beddings, but it's not very likely.

4. What are the symptoms of Scabies?

An intense itch, which is often worse at night, is the main symptom. The itch is an allergic reaction to the mites. A rash may also occur, which looks like tiny insect bites or spots. Scratching may cause sores and crusts to develop.

The rash is very often found at the “favourite” sites where the mites burrow to create tunnels. These “favourite” sites are where the stratum corneum is thin and where there are no hair follicles and include the web spaces between the fingers and adjacent of the fingers, the inner aspect of the wrist, the elbows, the underarms, skin around the nipples (especially in women), belly button, waist, lower buttocks, upper thighs, penis, knees and feet.

Infants and young children may develop similar lesions diffusely, but unlike adults, lesions are common on the face, scalp, neck, palms and soles.



Fig 2: Vesiculopustular lesions on both hands and the web of fingers

Fig 3: Hyperkeratosis and crusting gluteal cleft and folds

5. How is Scabies diagnosed?

The diagnosis is usually made based on the patient's symptoms and the history of disease. A sudden onset of itchiness with the characteristic skin rash is a clue. The attending doctor will also

take a history of whether a similar problem is present in family members, household contacts, close contacts and sexual contacts.

The diagnosis may be confirmed by scraping the affected area of the skin and examining it under the microscope to identify the scabies mite, eggs or fecal material. Most of the time, microscopic examination is not necessary as a confident diagnosis can be made based on the history and physical examination.

If in doubt, patients can consult a qualified dermatologist for proper diagnosis and treatment. The names and place of practice of qualified dermatologists in Malaysia can be found on the **Malaysian Association of Dermatologists (Persatuan Dermatology Malaysia) website – www.dermatology.org.my**

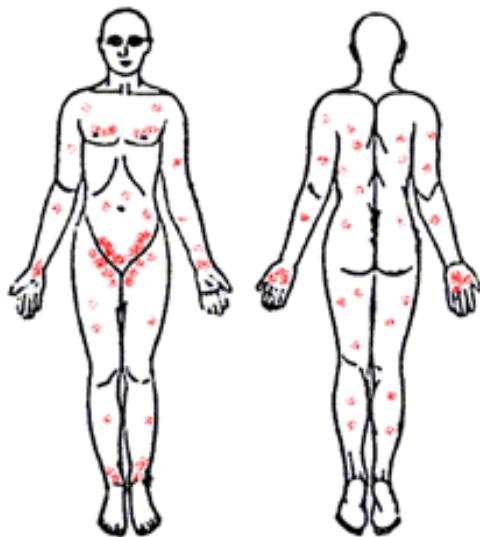


Fig 4: Typical site of scabies infestation

6. What are the complications of Scabies?

Due to the itchy nature of scabies, patients with scabies tend to scratch. Frequent scratching may lead to skin injury e.g. erosions on the skin. Bacteria may then be introduced into the skin through the injured areas of the skin causing infection. This is known as secondary bacterial infection of scabies and is a common complication.

People with a weak immune system, such as the elderly or those infected with HIV, can get a more serious type of scabies, called crusted scabies or Norwegian scabies. The rash looks scaly and crusty and covers a much larger area of skin than ordinary scabies.

7. How is Scabies treated?

The choice of treatment depends on many factors especially the patient's age, extent of disease, whether the patient has been treated previously, whether the patient is pregnant or breastfeeding etc. The attending doctor will select the appropriate modality of treatment taking all this factors into consideration. Some of the common agents are:

- 5% Permethrin cream or lotion (To be rinsed off after 8 to 12 hours and repeated one week later; safe for children, pregnant & lactating mother)
- 10-25% Benzyl Benzoate lotion (To be rinsed off after 24 hours then reapplied for 3 days; for adult & older children)
- 6-10% precipitated sulphur solution (To be rinsed off after 24 hours then reapplied for 3 days)
- 10% Crotamiton ointment (To be rinsed off after 24 hours then reapplied for 5-7 additional days)
- 1% Gamma benzene hexachloride lotion/cream (To be rinsed off after 6-8 hours; single application; not for children below 10 years old, lactating & pregnant women)
- Oral Ivermectin (Not licensed in Malaysia for human use)

Please bear in mind that none of these treatments should be used without the advice, prescription and supervision of a doctor.

In addition to the above medications which aim to eradicate the causative mites, the attending doctor may also prescribe antibiotics if there is a secondary bacterial infection and medications to help the itchiness and the rashes.

8. Is it possible to get scabies a second or third time?

Yes, as scabies is an infestation of the skin by a mite, it is possible to get a re-infestation.

9. What are the “Dos” of managing Scabies?

- DO use medications or lotions as directed by your doctor.
- DO inform your doctor who your close physical contacts are, even if they are without symptoms; as they must also receive treatment at the same time.
- DO wash all clothing, beddings, soft toys and towels that you have used in the past 2 days in hot water ($>50^{\circ}\text{C}$)
- Do put items that cannot be washed into plastic bags, and seal the bags tightly for 14 days to kill the mites.

- DO adhere to good personal hygiene.
- Do reserve the use of insecticidal powder or aerosol products only for materials or objects that cannot be washed (please consult your doctor first) .
- DO consult your doctor again if there is redness, pus, pain or swelling after treatment.

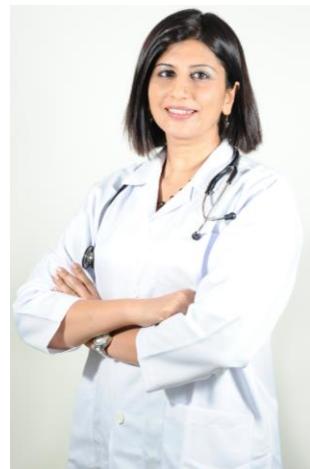
10. What are the “DON’Ts” of managing Scabies?

- DON’T share bedding.
- DON’T share clothing or towels.
- DON’T wash off the prescribed medication before 8 to 12 hours.
- DON’T use home remedies such as detergents, bleach, kerosene etc.
- DON’T use steroids cream unless prescribed by your doctor.

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