MSHC
MELBOURNE SEXUAL HEALTH CENTRE

Scabies treatment guidelines

Scabies is an infestation of the skin by the burrowing mite *Sarcoptes scabiei*. Infestation is easily spread through direct skin-to-skin contact with sexual partners and household members, and may also occur by sharing clothing, towels and bedding.

Causes

Scabies is caused by infestation of the skin by the burrowing mite *Sarcoptes scabiei*.

Scabies is easily spread through direct skin-to-skin contact with sexual partners and household members, and may also occur by sharing clothing, towels and bedding.

Scabies in adults is frequently sexually acquired.

Clinical presentation

Pruritus

Intense generalised pruritus that is usually worse at night.

The pruritus is due to a delayed type-IV hypersensitivity reaction to the mite and mite products (faeces and eggs).

Symptoms appear 3-6 weeks after initial infestation, or within 24 hours after a subsequent reinfestation.

Lesions

The most common lesions are erythematous papules, often excoriated, seen in a characteristic distribution over the interdigital web spaces, sides of fingers, under finger nails, flexor aspects of wrists, extensor aspects of elbows, anterior and posterior axillary folds, around nipples in women, penis and scrotum in men, around the umbilicus, upper medial aspect of thighs, buttocks, sides and back of feet.

The back is relatively not involved and the head is spared except in children.

Palms and soles are also affected in the elderly and in infants and young children.

Immunocompromised patients

In immunocompromised patients including HIV and HTLV-1, there are often atypical presentations such as crusted scabies, secondary infections or lesions that may involve the face or scalp. These patients may need specialist referral for treatment. If specialist referral is necessary, refer to a sexual health physician, infectious disease physician or a dermatologist.

Diagnosis

Diagnosis is based upon the typical appearance and distribution of skin lesions or rash and the presence of burrows.

The classic scabies burrow is a linear intra-epidermal tunnel produced by the moving mite and appears as short wavy greyish/ white threadlike elevations of 2-10 mm in length.

Burrows are difficult to find if there is excoriation or secondary eczema.

Nodular lesions may also be seen especially on the penis and scrotum in men, buttocks, groin, and the axillary regions and these are intensely pruritic.

The diagnosis can be confirmed by identifying the mite, eggs or faecal matter (scybala).

This is done by carefully removing the mite from the end of its burrow using the tip of a needle, by obtaining a skin scraping to examine debris under a microscope with KOH, or by identification of the scabies mite using a dermatoscope.

Management

Condition	Recommended	Comment
Scabies	**Permethrin 5% cream (Lyclear®), applied topically from the neck down, left on for 8 - 14 hours then thoroughly washed off**	Permethrin is classified as category B2 by the FDA – but may be used only if benefits outweighs the risk. Permethrin may be repeated in 1 – 2 weeks if still symptomatic. Patients should be informed that the rash and itch of scabies might persist for up to 2 weeks after treatment, and can be relieved with anti-itch soothing lotions c**rotamiton (Eurax®) 10% cream or lotion) or 1% hydrocortisone cream.** Pustular lesions may need antibiotic treatment. Treatment failure might be caused by resistance to medication or by faulty application of topical scabicides. Patients who do not respond to the recommended treatment should be re-treated with an alternative regimen.
Crusted scabies or severe or complicated cases	**Ivermectin (200 mcg/kg) PO, days 1 and 14**	Can also be used as an alternative for patients who cannot tolerate or comply with topical therapy. Contraindicated in children, in pregnant or breast-feeding women. Gamma benzene hexachloride (Lindane®) should not be used, as it is associated with neurotoxicity and aplastic anaemia especially in infants, pregnant and lactating women, and in the elderly.

Application of creams and lotions

Application is easier if applied with sponge or pastry/paint brush, paying particular attention to the elbows, breasts, groin, genitals, natal cleft, hands and soles of the feet including under the nails, but avoiding the eyes, nose and mouth. If one burrow is missed then the infestation will persist.

There is better absorption if the cream is applied after showering. Cream should be left on for at least 8 hours before washing off. Cream should be reapplied to the hands if they are washed during this eight-hour period.

Fingernails should be closely trimmed to reduce injury from excessive scratching.

Application should be repeated in a week, although an infested person is not generally infectious 24 hours after adequately applied treatment.

Environmental management

Bedding, clothing, and towels used by infested persons or their household, sexual, and close contacts during the previous four days before scabies treatment should be decontaminated. Bedding, clothing, and towels can be decontaminated by:

- washing at high temperature (60°C) and drying in a hot dryer, or
- dry-cleaning, or
- sealing in a plastic bag for at least 72 hours

Scabies mites generally do not survive more than 72 hours days away from human skin.

Shoes and other non-washable items should be placed in a tightly sealed plastic bag for at least 3 days to effectively eradicate mites.

Contact tracing & partner management

All household and close physical contacts should receive treatment at the same time as the person with scabies, even if asymptomatic. Treatment should be repeated in 7-10 days to maximise the chance of eradicating the infestation.

Bedding, clothing, and towels used by household, sexual, and close contacts during the previous 4 days before scabies treatment should also be decontaminated.