

Practice Guideline

Management of Scabies

Clinical Manifestations:

- Intensely pruritic, variably erythematous, papular eruption
- Itching worse at night
- In older child or adult, predominantly intertriginous
- In a child less than 2 years of age, can be head to toe, including palms and soles
- Characteristic skin burrows often obliterated by scratching
- Excoriations
- Occasionally nodular
- Occasionally, intense infestation with hyperkeratotic crusts (Norwegian scabies)

Epidemiology:

Humans are the source of the infection. Transmission occurs most often by close personal contact. Scabies can be transmitted as long as the patient remains infected and untreated, including the interval before symptoms occur. The incubation period in persons with no previous exposure is usually 4 to 6 weeks. Persons who were previously infected develop symptoms 1 to 4 days after repeat exposure to the mite.

Treatment of Choice:

Infected children and adults should apply a scabicide over the entire body below the head. Infected infants and toddlers need the scabicide applied to the entire body, neck and head, since scabies can affect all areas in this age group. Related to the epidemiology of scabies transmission and infection, the patient's household contacts must also be treated.

As recommended by the American Academy of Pediatrics Committee on Infectious Disease, the drug of choice is 5% permethrin, which is a synthetic pyrethroid known as Elimiteä . There is little resistance to its antiscabidical activity worldwide. Eight to 14 hours after application, permethrin should be removed by bathing. Permethrin toxicity is limited to rare contact dermatitis following use.

Because scabietic lesions are the result of a hypersensitivity reaction to the mite, itching may not subside for several weeks despite successful treatment. Topical lotions for itching, oral antihistamines or topical corticosteroids are helpful after the scabicide use. Antibacterial therapy is indicated for secondary bacterial infection of the excoriated lesions.

Alternative treatments:

Lindane (Kwellä) can be applied similar to permethrin and removed by bathing after 8 to 12 hours. Neurotoxicity from absorption through the skin has been reported in infants, and in other patients if frequent application or ingestion had occurred. Lindane use is contraindicated in children less than 1 year of age, in pregnant or lactating women, in persons with a seizure disorder or neurologic disease, in persons hypersensitive to Kwellä , and in cases of crusted scabies due to risks of increased absorption.

Crotamiton (Euraxä) lotion (non-formulary) has been used historically, but is associated with frequent treatment failures. Precipitated sulfur (6%) in petrolatum (non-formulary) has also been used, but is offensive in odor, stains, and is messy. Few studies of efficacy exist. A new therapy, oral ivermectin (non-formulary), is not FDA approved for use.

Control measures:

All household members need treatment (as prophylaxis or treatment) concurrent with the patient. All members of the household should be treated at the same time to prevent reinfection from each other. Bedding, towels, and clothing worn next to the skin during the 4 days prior to therapy should be laundered in a washer with hot water and dried in a hot drying cycle. Scabies do not survive more than 3 to 4 days without skin contact. Clothing that cannot be laundered should be removed and stored for one week to avoid reinfestation. Children may return to child care or school after treatment has been completed.

Inpatients: Inpatients should be on Contact Precautions until 24 hours after completing treatment. A private room is not required. Launderable underwear, clothing, and bed sheets used by the patient prior to treatment should be placed in red bags and sent to the laundry. Nonwashable items in contact with the affected area for head lice prior to treatment should be placed in plastic bags for 2 weeks.

References:

1. 1997 Red Book: Report of the Committee on Infectious Diseases, 24th edition. American Academy of Pediatrics.
2. Orkin M, Maibach HI. Scabies Therapy--1993. *Seminars in Dermatology* 1993; 12:22-5.
3. Brown S, Becher 3, Brady W. Treatment of Ectoparasitic Infections: Review of the English-Language Literature, 1982-1992. *Clinical Infectious Diseases* 1995; 20 (Suppl 1): 5104-9.
4. Meinking T, Taplin D. Safety of Permethrin vs. Lindane for the Treatment of Scabies. *Arch Dermatol* 1996; 132:959-62.

Information on Scabies**What are scabies?**

Scabies are little mites ("bugs") that burrow under the skin and cause severe itching and little bumps. The mites are so tiny they can only be seen with a microscope.

How do you get scabies?

Scabies are spread from one person to another, so anyone can get them. Scabies are very contagious, but it takes 30 days or so for symptoms (the itching) to develop. Pets do not catch or spread scabies.

How are scabies treated?

The scabies mite is killed by using 5% permethrin (Elimite[®]) lotion. This lotion should be applied to the entire body below the head in children and adults. In infants and toddlers, the lotion is applied to the entire body plus the head and neck. Elimite[®] lotion should be used everywhere (except eyes, nose and mouth), especially between fingers and toes, in skin folds and the belly button, and under finger nails. Elimite[®] lotion should be washed off by bathing 3 to 4 hours after it is applied. There is no need to apply Elimite[®] more than one time. Scabies are highly contagious, and others in the household have been exposed and are probably infected by the time you go to the doctor. Therefore, everyone living in the house must be treated at the same time.

What about clothing and bedding?

Machine wash all clothing, bed linens and towels used in the last 3 days. Hot water is the best. Machine dry if possible. Unwashable items should be put away for more than 3 days, since scabies cannot survive longer than that when not on a person's body.

When will the itching go away?

Elimiteã kills the scabies mite, but the itching and bumps may take 2 to 3 weeks to go away. The doctor will give you suggestions to help with the itching, such as using Aveenoã bath or lotion, Calamineã lotion or other non-prescription creams. If the itching and bumps are not better one week after treatment, please call your doctor.

What about the day care, school or work?

It is safe to return after the one Elimiteã treatment.