SCABIES

WHAT IS IT?
Scabies is an infestation of the skin caused by the human itch mite, *Sarcoptes scabei*. The microscopic scabies mite burrows into the upper layer of the skin to live and to lay eggs. The characteristic rash and intense itching is due to an allergic reaction to the proteins and feces of the mite. Scabies mites usually survive no more than 2-3 days away from human skin.

HOW IS IT TRANSMITTED?
- Scabies is spread by direct, prolonged skin-to-skin contact with an infested individual. Sexual partners and household members are likely to become infested.
- Sharing towels, bedding, and clothing is another means of transmission.
- Pets can become infested with a different species of scabies mite and develop mange.
  - If a human has close contact with an infected animal, he or she can develop a mild rash and itching. However, the mites that infect animals will not reproduce on humans and will die within a few days.
  - Therefore, no special medical treatment is required for humans. However, the animal should be treated for mange.

WHAT ARE THE SYMPTOMS?
- Severe itching, usually worse at night, is the most common symptom. The itching usually develops within 4-6 weeks of infestation but can occur within several days if the person has been exposed to scabies in the past. Even though symptoms may not appear for up to 2 months, the infested person is still able to spread scabies during that time.
- A rash consisting of brownish-red bumps is common. The rash is usually found between the fingers and toes, wrist, groin area (including the penis), belt line, nipple area, armpits, and buttocks. It usually spares the head, neck, palms, and soles of adults.
- Small grayish burrows or ridges, due to tunneling of the female mite under the skin, are found in <10% of cases.

HOW IS IT DIAGNOSED?
The diagnosis of scabies is based on your history and physical exam findings. Further laboratory testing is usually not necessary.

WHAT IS THE TREATMENT?
- **Prescription Medications**

  **Elimite (Permethrin 5%) cream**
- Elimite is the medication of choice. It kills mites and eggs for several days following treatment.
- Elimite should not be used if you have an allergy to ragweed or chrysanthemums.
- Apply Elimite in a thin layer to dry, clean skin from the chin down to the soles of the feet.
  - Be sure to include the skin between the fingers and toes, under the nails, and in the naval and buttock folds.
  - Do not apply Elimite to the vagina, the tip of the penis, the eyes, the nose, the mouth, or to any areas of open skin.
  - Leave it on for 8-14 hours (as directed on the product label). Typically, the cream is left on overnight and then washed off with lukewarm water in the morning.
  - Clean clothing should be worn after treatment.
Other Agents

- Other creams (Lindane, Crotamiton) are available for the treatment of scabies but are considered second-line due to risks of drug toxicity or treatment failure.
- In limited cases, an oral antiparasitic medication (Ivermectin) may be considered; however, it has not been FDA-approved for the treatment of scabies and may have greater toxicity when compared to Elimite.

General Environmental Measures

- Immediately following medical treatment, it is important to treat your belongings and living space.
- Wash in HOT water (at least 130°F) and run through a HOT dryer all contaminated clothing, head gear, bed clothes, towels, etc., used by the infested individual and close contacts during the 3 days prior to treatment.
- Items that cannot be washed should be dry-cleaned or sealed in a plastic bag for at least 72 hours to kill the mites.
- Vacuum rugs and upholstered furniture thoroughly. Discard the vacuum bag immediately.
- Insecticide sprays are not recommended, as they can be toxic if absorbed through the skin or inhaled.

Treatment of Close Contacts

- In some cases, household members and close contacts of an infested person should receive treatment even if they do not have symptoms.
- Treatment should occur simultaneously to prevent reinfestation.

After Treatment

- Infested individuals can usually return to school or work the day after treatment.
- It is not unusual for itching to persist from a few days to weeks after the successful treatment of scabies.
  - Antihistamines and/or steroid creams can help with the itching.
    - Consider taking a non-sedating antihistamine (such as Zyrtec, Claritin, or Allegra) during the day and a sedating antihistamine (such as Benadryl 25-50mg) at bedtime.
    - Prescription steroid creams can be used twice daily if needed for itching. Only a thin layer is needed. Overuse can lead to thinning and whitening of the skin.
  - Avoid excess soap and exposure to hot water, as they may dry out the skin and intensify the itching.
- Retreatment may be necessary if
  - Itching persists more than 2-4 weeks after treatment or
  - New rashes or burrows continue to appear 48 hours after treatment.

RECOMMENDED WEBSITES:

- www.cdc.gov
- www.mayoclinic.org