

# **SUMMARY**

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Scabies is a highly contagious disease caused by small mites belonging to the species Sarcoptes scabiei. This disease has affected man for countless generations. The female mite are responsible for the clinical manifestations of the disease. They excavate thin tortuous tunnels in the stratum corneum of the epidermis and continue burrowing only if the skin temperature is warm. Sarcoptes scabiei var. hominis is an obligate parasite to humans, it can exist under normal circumstances for only 2 - 3 days not on human skin. The number of adult female sarcoptes scabiei per patient at any time is 3 to 50 ovigerous female mites. In the rare variety, Norwegian scabies, thousands of mites infest a person due to defective immunologic response.

Transmission of the disease is much often dependent on personal contact, the more prolonged and intimate the contact, the more likely is the parasite to be transmitted.

The entire development of the mite requires 8 - 14 days. The adults live about 4 weeks. Copulation takes place once and renders the female fertile for the rest of its life and the male dies, then the female makes a burrow where it lays the eggs.

The incubation period may be from 1 day to 4 or 6 weeks. The only symptom in uncomplicated scabies is itching which is usually worse at night. The pathognomonic lesion is the burrow representing the tunnel that the gravid female mite excavates in the stratum corneum while laying her eggs. The burrow measures 1-10 mm. in length. It may be straight or curved. The usual sites of the burrow are: the anterior aspect of the wrist and fingers (webs), the elbows, the anterior axillary fold, skin around the nipple and the natal cleft and the penis in males, around the umbilicus, on palms and soles (in children). In infants, all skin surfaces are susceptible. Other secondary lesions are papules, vesicles, pustules and eczematous lesions, nodules and excoriation.

Animal-transmitted scabies differs in its distribution and usually has a self-limited course. It is not contagious from human to human. There is evidence suggesting that immunologic factors with delayed hypersensitivity play the principal role in cyclic fluctuation of the incidence of scabies.

Diagnosis depends upon the history of the disease, the clinical picture and the investigations which are very important especially if the lesions are

not typical. This is can be done by obtaining skin scrapings and identifying the mite or by needle extraction or by taking a biopsy from the lesion and identifying the mite.

It was found that the disease was largely increased during the war time and decrease in periods of peace. But, the epidemics probably would have occurred without the wars. Poverty and poor hygiene are among the factors which increase the incidence of scabies. Herd resistance may explain the cyclic occurrence of scabies. It is about 15-year interval between the end of one and the beginning of the next epidemic. This fluctuation is obscure, and may be multifactorial. However, the duration of epidemics is not constant, nor is the interval between epidemics. So, fluctuations is a more suitable term to apply to the differing incidence of scabies

Scabies is easily cured if the details of the treatment are scrupulously adhered to the patient. All members of the personal household should be treated at the same time, under clothing and sheets should be laundered or put away for a week, after which they will no longer be contagious. The ideal scabicide must kill both the parasites and their eggs. The whole body surface below the collar line must be treated.

Among the specific antiscabietic drugs are:

1. Gamma benzene hexachloride (GBH, Lindane, Kwell)  
as a 1% lotion or cream, it is washed off after 12 hours. It is not used in infants or young children or in the pregnant female because of its toxicity.
2. Sulphur ointment: 5 - 10% in petrolatum. A bath before the first application, and another one night after the last application are desirable. It is applied for 3 applications at 12 - 24-hour intervals.
3. Benzyl benzoate emulsion (25%): After a thorough bath and left for 48 hours and then washed off.
4. Crotamiton (Eurax): As 10% cream or lotion is applied followed by a second application after 24 hours and a third if necessary.
5. Nitrofurazone (Furacin): In solution or ointment, it is advised in mild to moderate cases only.
6. Topically applied thiabendazole (10% suspension) applied twice daily for 5 days.
7. D.D.T..

Antihistaminics for pruritus, syst nic anti-biotics for pyoderma and intralesional cort. costeroids for nodular scabies.

Prevention of the disease involves 2 factor :

1. Personal:

Avoidance of proximity to any s abetic patient and sharing infested person's cl. thes and towels.

2. Social:

The 4 phases in eradication are data gathering, information; treatment and su mary. It is helpful to provide a preferred treatm nt plan aiming at simultaneous treatment of pati nts if possible.