



# Scabies



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# Definition

Severely Itchy Human  
Infestation caused by  
penetration of **Sarcoptes  
scabiei var hominis**, an  
obligate human parasite  
into the epidermis



# Incidence

- One of the most common skin disease in our community
- Affects all races worldwide
- Responsible for major outbreaks in nursing homes, prisons, hospital wards,

# Epidemiology

- Sexes equally affected
- Children & teenage mostly affected

# Causative Mite

- *Sarcoptes scabiei* var. *hominis*
- Adult female 0.4mm long  
0.3mm broad
- 04 pair of legs
- Ovoid, dorsoventrally  
flattened



# Life Cycle

Adult female mite Excavates a tunnel in st. corneum  
Fertilization occurs in the burrow

Eggs & mite faces are laid in the burrow

Larvae emerge (06-legged after 03-04 days)

Larvae penetrate the roof of burrow & emerge on the skin

Larvae change into nymphs

Nymphs into adult male & female mites

# Modes of Spread

- Close personal contact
- Transmission through fomites can occur, however mite can live off human skin only for three days

# Factors predisposing to Spread

- Overcrowding
- War and adverse situations
- Sharing of Beds



# Clinical Features (Symptoms)

## Severe Itching

- Worst at night
- Starts 03-04 weeks after the infection is acquired (Delayed Hypersensitivity)
- Starts immediately in case of reinfection of cured patient

# Clinical Features

## Burrows



- Pathognomonic skin lesion
- Slightly raised tortuous lesions with vesicle or pustule at one end
- Sites: Fingerwebs, Wrists, borders of hands, sides of fingers, feet (usually instep), male genitalia,

# Clinical Features

➤ Excoriated papules

➤ Infective Lesions

➤ Pustules

➤ Furunculosis

➤ Impetigo

➤ Cellulitis



# Clinical Features

- Eczematous Lesions
- Acute
- Subacute
- Infected eczema



# Sites most Commonly affected in Scabies

- Finger-webs
- Sides of Fingers
- Wrist
- Borders of Hands
- Elbows
- Axillae
- Scalp & Face in children

# Sites most Commonly affected in Scabies

- Areolae in female
- Umbilicus and lower abdomen
- Male Genitalia, Buttocks
- Feet Insteps
- Scalp, face,/Palms & Soles in children/elderly/immunocompromised

Burrow (linear thread like elevated lesion)



# Burrows and Pustules in Fingerweb







# Burrows



# Crusted infective lesions in fingerwebs



# Crusted lesions Fingerwebs



# Excoriated Papules



# Excoriated Papules (*Umbilicus* *And Lower Abdomen*)



Itchy Papules &  
Nodules over  
Genitalia



# Infective Lesions (Impetigo)





# Infective Lesions (Furunculosis)



# Infective & Eczematous Lesions



# Nipple Eczema



# Papulo-Pustular Lesions (*soles* *especially in Infants*)



# Scalp & Face Lesions in Infants (*Eczematous*)



# Burrows And Pustules over palm



# Itchy post-scabitec Nodules (*esp. medial thigh, scrotum, axillae*)



# D/D

- Eczema
- Pyoderma
- Insect-Bites
- Systemic Diseases



# Scabies in Immunocompromised (Norwegian Scabies)

- Erythroderma
- Crusted Plaques







# Microscopy



# Management

- General Measures
- Topical Therapy
- Systemic therapy

# General Measures

Predisposing Factors be reduced

Education of patient

# Topical Therapy

- 5% permethrin cream/lotion
- 1% Gammabenzenehexachloride (Lindane) cream/lotion
- 10% benzyl benzoate lotion
- 1% malathion lotion
- 5-10% sulphur ointment
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# Method of Application

➤ All the persons in contact should start treatment the same day even if not suffering from itching

➤ Apply the medicine at night from below chin to feet over dry skin for 12 hours.

**Reapply only after 7 days**

➤ If the patient washes hands or any other body area during the treatment period, reapply the medicine over the washed area.

# Method of Application

- Change garments /bed linen/Towel after applying medicine.
- Clothes, Towels & bed-linen should be washed with hot water after first application of medicine.
- Items that cannot be washed should be put in plastic bags for 72 hours to contain the mites until killed

# Who Should Be Treated In Scabies

- All Affected Persons AND
- All **household members** and sleeping/sexual partners of patients even if they have no symptoms as it may take up to 06 weeks to manifest itching after acquiring mite .Close contacts would continue to pass on mite to others
- **Everyone who is treated should be treated at the same time**

Patient may complain of itching For  
2-3 weeks after appropriate  
treatment

- Oral antihistamines
- Topical crotamitone , soothing lotions & mild steroids
- Intralesional steroid injections for persistent post-scabietic nodules

# Systemic Treatment

- Oral antihistamines
- Oral antibiotics if secondary infection
- Oral Ivermectin 200 microgram/kg single oral dose is an alternative treatment

# Message

Scabies is **cured** if diagnosed & treated properly. **Education** of patient is crucially important.