

Scabies



#### DR. ZAIB AHMAD

#### Definition

<u>Severely Itchy</u> Human Infestation caused by penetration of **Sarcoptes scabieie var hominis, an** obligate human parasite into the epidrmis



#### 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

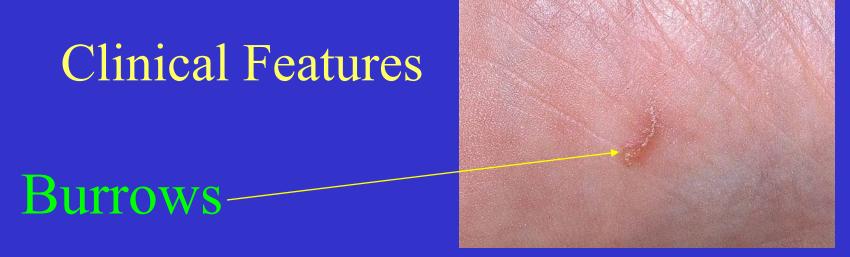
Clinical Features (Symptoms)

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



≻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)





- Eczema
- Pyoderma
- Insect-Bites
- Systemic Diseases

Scabies in Immunocompromised (Norwegian Scabies)

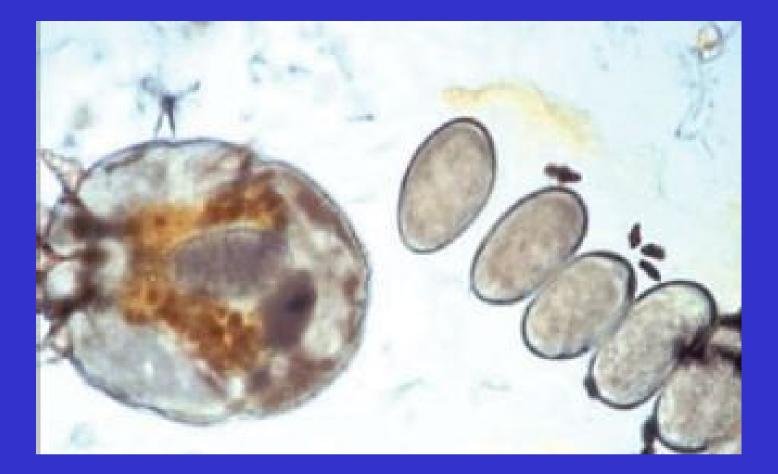
- Erythroderma
- Crusted Plaques







## 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
- $\succ$  1% malathion lotion

>

➤ 5-10% sulphur ointment

#### 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.