## Hand foot and mouth disease

Typical disease:

Children under 10 more so under 5

Outbreaks in school

Causative agents: coxsackie A16 → URT infection followed by vesicular rash → self limited

enterovirus 71 → associated with encephalitis and myocarditis

Atypical disease: adults and teenagers → more aggressive and severe ,, caused by coxsackie A6

Transmission : feco-oral , direct contact

Symptoms: URT symptoms BEFORE vesicles ,, constitutional

Vesicles : oral painful football-shaped / eye-shaped, buccal mucosa and tongue

very important : it spares the posterior pharynx

Soles and palms →red papules that turn into gray vesicles

Treatment: symptomatic , may consider hospital admission if severe

## Small pox:

Caused by variola virus and orthopoxvirus

Can cause pandemics

Maculopapular → vesicles → pustules → scabs

Death may occur with fulminant disease

No treatment / only supportive

## Orf: soremouth infection

Caused by a DNA virus related to smallpox : parapoxvirus

Infects fingers of people with contact with goats and sheep, also human to human

One can be infected multiple times

No treatment, if bacterial super-infection→ antibiotics

Small papule → vesicle → nodule → ulcers and crusts

Molluscum contagiosum:

Caused by a virus

Infects healthy and immunocompromised (severe).

More common in children 2-11. In adults, sexually transmitted by direct contact.

Causes flaccid vesicles, raised papules. Not erythematous, central umbilication.

On face, trunk, pubis

Treatment: Resolve on their own, may consider cryotherapy

Complications: scarring, bacterial infection, conjunctivitis

Impetigo:

Children 2-5 in warm weather

Caused by s. aureus , GAS . After a local skin trauma

The most common bacterial skin infection in children

70% non-bullous crusted lesions.

Highly contagious.

On face and extremities with regional lymphadenopathy

Small macule/papule → small vesicles→ flaccid bullae→ crusted lesion with yellow discharge.

Complications: cellulitis, post-strep. Glomerulonephritis

Treatment: topical, mupirocin

Numerous lesions or not responding to topical → systemic oral antibiotics: flucloxacillin

If MRSA suspected: doxycycline, clindamycin or co-trimoxazole.

## Ecthyma:

Punched out ulcer that invades the dermis. Surrounded by red margins.

Caused by s. aureus or GAS.

In immunocompromised: p. aeruginosa

A deeper form of impetigo

Treatment: empiric with flucloxacillin or cephalexin

If cultures yield:

p. aeruginosa → antipseudomonal drugs: piperacillin-tazobactam

Strep. Alone → penicillin

Dermatophytes: a group of fungi

Need keratin for their growth

transmission: direct contact with patients or animals or soil

Classification according to age group:

Children: tinea capitis (scalp hair)

tinea corporis (trunk and limbs)

tinea faciale (face)

Adolescents: tinea manuum and pedis (athletes foot)

tinea unguium (nails)

Adults: tinea cruris (groin)

tinea barbae (beard)

tinea corporis gladiatorum (wrestlers)

Dx: distinguish from other non-infectious diseases (demarcated lines)

KOH mounts to see hyphae, UV lamp.

Rx: some resolve without therapy, topical antifungals e.g. azoles

must be continued over weeks to months

Leishmania: a parasite from the trypanosome family, transmitted through sandflies

Disease of the poor. (iran, Iraq, Syria )

Three types: cutaneous, mucocutaneous, visceral

1. cutaneous: skin lesions on face or leg. Pigmented purple scars.

Papule at site of infection→ small nodule→ painless ulcer→ pigmented crust

2. mucocutaneous: destruction of mucous membranes of nose, mouth and throat.

Resolve over months but round depressed scars remain.

May resemble other skin lesions e.g. sporotrichosis

Dx of cutaneous leishmaniasis: clinical picture + detection under microscope (biopsy or skin scrapes). + CBC shows reduced cell count

Rx: local heat for 2-3 hours a day

pentavalent antimonials

given for at least 3 weeks

Scalded-skin syndrome:

Most common in neonates.

Caused by staphylococcus that have an exotoxin (exfoliatin)

Staph. Aureus with exfoliative toxin A and B

due to hematologic spread of the toxin (systemic bacteremia).

Breaks down desmoglein 1 resulting in acantholysis.

Symptoms: preceded by prodromal illness, then the acute phase and red painful skin with bullae formation.

Signs: peeling of skin, flaccid blisters, mucous membranes are spared, positive Nikolsky's sign.

Dx: blood cultures are positive, skin biopsy will show acantholysis.

Rx: MUST admit to ICU

systemic IV antibiotics

systemic steroids

If severe IV immunoglobulins and plasmapheresis