Bacterial Infections

Pyoderma

- It is an infection of the pyogenic organism.

Common → Staphylococcus aureus, Group A β hemolytic streptococci.

less common → E. Coli, Pseudomonas.

Type:

1) Primary → In a previously normal skin. Single organism and distinct morphology.

2) Secondary → In a skin previously damaged by scabies, fungal, eczema etc.

Primary Pyoderma

1) Impetigo

- Caused by Staphylococcus aureus in mild climate and streptococcus in hot climates.
- Two types → i) Impetigo Contagiosa (Non Bullous)
  ii) Bullous Impetigo

i) Impetigo contagiosum:

- It is extremely contagious.
- R → Affects the face of the children.
  O → Starts as small vesicles or pustules with erythematous bare which rupture and form erosions and crusting (golden yellow crusting).
- It may become confluent & multiple.

Complication → Post streptococcal glomerulonephritis, Cellulitis.

ii) Bullous Impetigo:

- It occurs in neonates and infants.
- Caused by staphylococcus aureus mostly.

O → Starts as Vesicles or bullae containing yellow fluid and break open cause yellow crusts.
N → Single or multiple
L → Skinfolds.

Investigation → Swab of the skin.

Complication → 1) Staphylococcal scalded skin Syndrome (SSSS).
→ occurs predominantly in neonates.
→ Another form of Bullous impetigo which is localized.
R → All over Body
O → Starts in the groins, axilla, with erythema, blisters and superficial erosions.
C → Systemic changes are seen.
Investigation → Sinpping with scissors without anesthesia (D/D Epidermal necrolysis)
2) Toxic shock syndrome → Strawberry Tongue
- Fever, desquamating rash with multi-organ involvement and circulatory collapse.
caused by staphylococcus toxins.

2) Ecthyma

Cause → Staphylococcus or Streptococcus or both.
- Predisposing → Malnutrition, Poor hygiene, and underlying skin diseases, drug trauma - abrasions.
Location → Usually in distal extremities.
Lesion → Adherent crust overlying the ulceration.

2) Folliculitis

Inflammation of the hair follicle.
Superficial (ostiam of folliculitis) - Folliculitis superficial.
· Deep folliculitis (e.g. Carbuncle or Furuncle).

Superficial Folliculitis

Cause → Staphylococcus aureus.
Physical → Trauma. chemical → Mineral oil.

Location → Except palms & soles, (axilla), scalp,
In Beard → Sycosis Barbae.
Neck → Sycosis Nuchae.

S → Appears as pustules with hair in the centre with erythematous base.
N → Multiple or single.
Heals without scarring within 7-10 days.

Complication → It may cause deep folliculitis.

Deep Folliculitis

1) Furuncle (Boil)

- Infection of the hair follicle and perifollicular area.

Cause → Staphylococcus aureus.

Predisposing → Malnutrition, HIV & diabetes.
Friction by clothes.

Location → Any body site, neck, buttocks. Anogenital.

Onset → Inflammatory Follicular nodule and then pustular, → abscess.

Sertral → Fluctuant, Tender, Erythematous
Breaks and gives out ~~scar~~ pustules.
Heals with a scar.

Complication → Abscess.

2) Carbuncle

- It is a cluster of boils, due to deep injection of the hair follicle extending upto the subcutaneous tissue.

Caus → Staphylococcus aureus.

Pre-disposing → Malnutrition, Immunocompromised - Diabetes mellitus -

Location → Neck, shoulders, Hip.

S → Contagious Hair follicles with multiple discharging points on the surface.
- Sieve like appearance.
- Discharges purulent matter.
- Healing always with scarring

C → Systemic symptoms are usual.

4) Erysipelas.

- Acute infection of the dermis also called superficial forms of the Cellulitis.

Cause → Streptococcaisl.

Pre-disposing → Always with previous skin cut with ulcers, Eczema, Tinea
- Poor nutrition, Immunocompromised.
- Diabetes. Ear injection.

Location → Face.

S → Erythematous, Edematous, Elevated. Well demarkated regions.
- Hot and painful with superficial involvement.

C - Regional node lymphadenopathy.

Complication → lymphodema, Glomerulonephritis, Cavernous sinus thrombosis