



# **BACTERIAL INFECTION**

## Common staphylococcal infections:

- Impetigo
- Furunculosis
- Carbuncle

## Common streptococcal infections:

- Impetigo
- Erysipelas
- Cellulitis

# Impetigo

## Definition:

It is a contagious superficial pyogenic infection of the skin caused by staphylococci & streptococci. It is more common in children & occurs mostly during summer

## Clinical types impetigo:

### 1) Non-bullous Impetigo

It may caused by staphylococci, streptococci or both

### 2) Bullous Impetigo

It usually caused by staphylococci aureus

# Clinical picture

- In non-bullous Impetigo, the initial lesion is a very thin walled vesicle on an erythematous base
- The vesicle ruptures very rapidly and the exuding serum dries to form yellowish brown crusts
- The crusts eventually dries and separate to leave erythema, which fades without scarring
- Spread of the lesions to other parts of the body occurs by fingers or towels
- In severe cases, there may be regional adenitis with fever and other constitutional symptoms



*Impetigo*















- Impetigo occurs most frequently on the exposed parts of the body: the face, hands, neck and extremities
- Impetigo of the scalp is a frequent complication of pediculosis capitis
- In bullous Impetigo, the bullae are few in number, less rapidly ruptured, much larger and may occur anywhere on the body
- Acute glomerulonephritis may occur as a complication of group A beta-hemolytic streptococcal skin infection



## Treatment of impetigo:

- \* Control of predisposing factors such as  
( insect bites, pediculosis, scabies)
- \* Topical antibiotics such as  
( Fusidic acid bacracin)
- \* Systemic antibiotics such as  
( Flucloxacillin or erythromycin)

# Furunculosis / Boils

**Boil** is an acute round, tender, circumscribed follicular staphylococcal abscess that generally ends in central suppuration

**A carbuncle** is merely two or more confluent furuncles, with separate heads



## Predisposing factors

- \* **Impaired integrity of the skin surface by**

- Irritation
- Friction
- Hyperhidrosis
- Dermatitis or
- Shaving

- \* **Presence of a contagion or autoinoculation from a carrier focus, usually in the nose or groin**

- \* **Systemic disorder as**

- \* Malnutrition
- \* Blood diseases
- \* Diabetes
- \* AIDS

## Clinical picture

- The lesions begin in hair follicles, and often continue for a prolonged period by autoinoculation
- Some lesions disappear before rupture, but most undergo central necrosis and rupture through the skin, discharging purulent, necrotic debris
- The sites commonly involved are the face and neck, the arm, wrist and fingers, the buttocks and the anogenital region



## Treatment of boils

- \* Topical and systemic antibiotics as for impetigo
- \* Incision and drainage of some cases

# Cellulitis and Erysipelas

- **Cellulitis** is an infection of the subcutaneous tissue
- **Erysipelas** is more superficial as it involves the dermis and upper subcutaneous tissue
- **Cellulitis** may extend superficially and erysipelas deeply so that the two conditions overlap
- **Cellulitis and erysipelas** are caused mainly by *Streptococcus pyogenes*



## Clinical picture

- Erythema, heat, swelling and pain or tenderness are constant features
- In erysipelas the edge of the lesion is well-demarcated and raised, but in Cellulitis it is diffuse
- Blistering and hemorrhage are more common in erysipelas
- Lymphangitis and lymphadenopathy are frequent
- The face and the legs are the most frequent sites affected
- Unusual complications
  - Gangrene
  - Metastatic abscesses
  - Grave sepsis



# Treatment

Systemic penicillin and cephalosporins are usually effective











*Erysipelas*





THANK YOU