Skin Infections

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Skin Infections in Primary Care

- Impetigo
- PVL infections
- Infected eczema
- Cellulitis
- Scarlet fever
- Erysipelas
- Necrotising Fasciitis
Classification of Infection

- Erysipelas
- Impetigo
- Folliculitis

- Ecthyma
- Furunculosis
- Carbunculosis

- Cellulitis

- Superficial fascia
- Subcutaneous tissue
- Deep fascia
- Muscle

- Necrotizing fasciitis
- Myonecrosis (clostridial and nonclostridial)
Infections caused by *Staph. aureus*

- Folliculitis
- Boils
- Impetigo
- Infected eczema
- Ecthyma
- PVL staph infection
- Scalded skin
- Staphylococcal toxic shock
Impetigo

- Can occur secondary to break in skin or spontaneously
- Face / hands / skin folds
- Vesicular lesions - ooze -> golden brown crust
- Contagious
- Topical fucidic acid 2% tds for 5 days
- Large areas - oral Tx - flucloxacillin
PVL (Panton- Valentine Leukocidin) Infection

- Some strains of *Staph. aureus* produce this toxin
- Furuncles / carbuncles
- Invasive - Tissue necrosis
- Can cause deep recurrent abscesses
- Prolonged antibiotic course
  - Rifampicin + clindamycin - 4/52
  - Chlorhexidine washes
  - Mupiricin nasal ointment
Infected eczema

- Mostly St. aureus
- If widespread - oral flucloxacillin
- Emollients with antibacterial activity if recurrent
Scalded Skin Syndrome

- Exotoxin release (coag +ve staph)
- Neonates / young children
- Red, blistered skin - looks like burn
- Tissue paper wrinkles, large blisters which burst -> raw skin
- Extremely painful - analgesia
- Intensive support to counteract fluid loss
Infections caused by Group A Strep.

- Cellulitis
- Scarlet fever
- Erysipelas
- Septicaemia
- Necrotising fasciitis
Cellulitis

- Usually lower extremities
- Rapid onset - pain / tenderness
- May be systemically unwell
- Usually unilateral
- Demarcation, erythema
- Inflamed lymph nodes
- Blistering
- Usually GpA Strep - also Gp C or G or St. aureus

- Needs systemic IV treatment?
  - Temp ↑↓
  - Tachycardia
  - Hypotensive

- Flucloxacillin
  - Co-amoxiclav for facial - ?H.influenzae
Erysipelas

- Commonly affects face or lower extremities - butterfly type rash on face
- Well defined with raised borders
- Pain
- Inflammation
- Fever
- Penicillin V or IV BZP if systemically unwell
Scarlet Fever

- Gp A Strep -> pyrogenic exotoxins
- Notifiable disease
- Widespread rash
  - Tiny spots
  - Blanches with pressure
- Usually childhood illness
- May occur after sore throat
- Can lead to septicaemia
- Contagious 1-4 day incubation
- Small risk of quinsy, otitis media, pneumonia, meningitis
- 10 day course Pen V
Necrotising Fasciitis

- Gp A Strep but often polymicrobial
- Pain >> physical findings
- Unwell - > temp, heart rate
- Rapid progression
- Gas in tissues - > crackling
- Violaceous bullae with cutaneous haemorrhage and skin soughing
- IV abx - V broad spectrum
  - BZP+Flucloxacillin+Clindamycin+Metronidazole +/- Gent
- Rapid surgical review
Case Study

- Patient presents to pharmacy with rash opposite
- What is your response?
Questions?

- When did rash appear?
- Is the rash anywhere else?
- Are they well in themselves? No temperature, chills, fevers, joint pains, aches etc
- Is it itchy or sore?
Further information

- Rash developed yesterday and seems bigger today. It is slightly itchy.
- Patient feels slightly feverish and has sore joints
- What further questions may you want to ask?
Further information

- Patient was up in Trossachs at weekend with her dog walking in the woodland. It was idyllic - there were lambs in the fields and deer running wild.
Erythema migrans

- Round or oval in shape
- Pink, red or purple
- Often has clearing at centre - bullseye
- Appears 3-10 days after tick bite - usually at site of bite
- Usually larger than 5 cm but can be very large
- May be slightly tender or itchy
Lyme disease

- *Borrelia burgdorferi*
- Tick borne disease
- Up to 90% will present with erythema migrans
- Can have significant complications = cardiac, neurological, joint (arthritis)
- Treat with Doxycyline 100mg bd for 10-21 days (depending on severity) -
- 3-4/52 if facial palsy or other complications
Questions?