Atypical Rashes that Present though the Emergency Department

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Overview

• Emergency Dermatology
  – Function of the skin

• Life threatening conditions

• Common ED presentations
Emergency Dermatology

- Inpatient Referrals
## Emergency Dermatology

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Erythroderma
Erythroderma

- ≥ 90% skin involvement
- Eczema
- Psoriasis
- Drugs
- Lymphoma
- Low, but significant mortality (3-4%)
Erythroderma

= skin failure
  • Fluid loss
  • Infection
  • Heat loss
  • catabolic
Erythroderma

• Diagnosis
  – History
    • PMH, FH, drugs
  – Clinical Signs
    • Nails, mucosa, blisters, pustules
  – Histology
  – Time

• Management
  – Admit
  – Fluid balance
  – Temperature control
  – Prevent/treat infections
  – Nutrition
  – Topical Emollients
Acute Blistering
Acute Blistering

- TEN
- Staphlococcal Scalded Skin Syndrome
- Immunobullous disease
  - Pemphigus
  - Pemphigoid
- Insect bites
- Eczema (esp. hand)
Staphlococcal Scalded Skin Syndrome
Staphlococcal Scalded Skin Syndrome

- Most common in children
- Due to phage gp II toxins
- Toxins bind to targets in the skin causing a superficial split in the epidermis
- Often flexural and painful
- Treatment is supportive plus anti-staphlococcal antibiotics
Toxic Epidermal Necrolysis
Toxic Epidermal Necrolysis

- Rare (1/million/year)
- Commonest cause is drugs
- Full thickness epidermal loss (>30% BSA)
- Tender, painful red rash
  - Extends quickly
  - Flaccid blisters
- High mortality
Drugs in TEN

• Anticonvulsants
  – Carbemazepine, phenytoin, phenobarbital

• Antibiotics
  – Sulfonamides (cotrimoxizole), beta-lactams (penicillin, cephalosporin)

• Allopurinol

• NSAIDs
Management of TEN

• Multidisciplinary
  – ICU, dermatology (nurses and doctors), ophthalmology

• Remove precipitating factors

• Supportive
  – Fluids, electrolytes
  – Temperature regulation, nutrition
  – Prevention of sepsis
  – Topical emollients
  – Pressure relieving mattress
  – Pain relief
Pemphigus & Pemphigoid
Pemphigus & Pemphigoid

**Pemphigus**
- Flaccid blisters
- Often only erosions are left
- Oral ulceration common

**Pemphigoid**
- Elderly (>65)
- Tense blisters on urticated base
- Oral involvement uncommon
Angioedema
Angioedema

• Urticaria of mucosa

• Tongue and laryngeal involvement are potentially life threatening

• C1 esterase inhibitor deficiency is rare

• Recognised precipitant rare
Angioedema Management

• Reassure patient
• Look for tongue and laryngeal involvement
• Antihistamines
  – Non-sedating and sedating
• Systemic steroids
• ?Adrenaline
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Atopic Eczema: Treatment

• Emollients ++++
• Topical Steroids
  • Eumovate (face and flexures)
  • Betnovate or elocon (body)
• Antibiotics (if signs of infection)
• Antihistamines
• Oral steroids
Allergic Contact Dermatitis

- Type IV hypersensitivity reaction
- Localised, well demarcated eczematous patches
- Commonly affects face, hands and feet
- Common allergens:
  - Nickel, preservatives, fragrances, glues, rubber.
Allergic Contact Dermatitis Management

• Avoid allergen if known
• Emollients ++++
• Topical steroids: potent if necessary
  – Dermovate
• Antibiotics (if signs of infection)
• Refer for patch testing
Psoriasis

- Guttate
  - Small plaques
  - Often after streptococcal throat infection
  - Widespread
  - Difficult to use topical therapies
  - Needs phototherapy
Psoriasis

- Pustular Psoriasis
  - Emergency
  - Patients often unwell
  - Treat as erythroderma
    - Admit
    - Emollients
    - Supportive care
  - Refer to dermatology
Cellulitis

- Erythema and swelling
- Commonly affects lower legs
- Unilateral
- Mild systemic upset
- Strep +/- staph
- Treatment
  - IV antibiotics
    - Penicillin
    - flucloxacillin
Erysipelas

- Face most commonly
- Rapid onset
- Pain, erythema and oedema
- Systemic upset
- Streptococcal
- Spreads rapidly
- Treatment
  - IV penicillin
  - Analgesia
Eczema Herpeticum

- Infection in a patient with eczema
- Herpes simplex type 1 or 2
- Rapid onset
- Often systemically unwell
- Multiple monomorphic vesicles
- Painful

Treatment
- Viral swab first (from a fresh blister)
- Aciclovir (IV if patient too sick to take orally)
- Ophthalmology review if eye involvement
Urticaria

- Itchy wheals that last <24 hours.
- Comes and goes
- Most cases not due to allergy
- Cause often not found
- Treatment
  - Oral antihistamines
    - Non-sedating (cetirizine)
    - Sedating (hydroxyzine)
  - H2 blockers
  - Antileukotriene agents (montelukast)
  - Oral steroids
Lumps and Bumps
Summary

• Understand the functions of the skin
• Recognise unwell patients
• Take an accurate history
  – especially drugs
• Prescribe emollients