PAEDIATRIC ACUTE CARE GUIDELINE	
Impetigo	
Scope (Staff):	All Emergency Department Clinicians
Scope (Area):	Emergency Department

This document should be read in conjunction with this DISCLAIMER
http://kidshealthwa.com/about/disclaimer/

Impetigo

Impetigo is a contagious bacterial infection of the superficial layers of the epidermis.

Background

- Impetigo is the most common bacterial skin infection in children. Commonly called school sores.

General

There are two general types:

- **Non-bullous Impetigo** (impetigo infectiosa) is most common between the ages of 2 and 5 years. It has a predilection for the nares and around the mouth, and also commonly occurs on the extremities at sites of trauma. Impetigo may develop at sites affected by chicken pox, burns, insect bites, abrasions and lacerations. There is usually little or no pain and no constitutional symptoms.
- **Bullous Impetigo** is most commonly an infection of neonates and typically occurs on the trunk and extremities. Flaccid bullae occur which rupture easily. This condition resembles a localised form of Staphylococcal Scalded Skin Syndrome (SSSS).

Pathogens:

Staphylococcus aureus and *Streptococcus pyogenes* (either individually or in combination).

Complications:

These are relatively uncommon but include:

- Lymphadenitis
- Scarlet fever
- Osteomyelitis
- Septic arthritis
- Pneumonia
- Septicaemia
- Post-streptococcal glomerulonephritis – rarely and does not appear to be influenced by antibiotic treatment.

Risk factors

Impetigo often spreads rapidly, and the infection is generally more severe in children suffering atopic dermatitis (and other dermatological conditions).

Assessment

- Consider MRSA

Examination

- Lesions typically begin with a single 2-4mm erythematous macule, which rapidly turns into a vesicle or pustule, which ruptures leaving a honey-coloured crusted exudate
- Spread to adjacent skin can be rapid
- Resolution without scarring is to be expected

Investigations

- Cultures of the lesions are **only** required if initial treatment has failed. If performed, swabs should be obtained from beneath the lifted edge of a crusted lesion.
- Nasal swabs (and occasionally swabs from the axillae and perineum) are helpful in cases of **recurrent** impetigo to identify nasal (or other) carriage of *Staphylococcus aureus*

Differential diagnoses

The following may develop secondary impetigo:

- Viral infections (e.g. **Herpes simplex virus**, Varicella zoster)
- Fungal infections
- Parasitic infections (e.g. scabies)
- Eczema / atopic dermatitis

Management

Oral antibiotics are not always required

Initial management

- Topical 2% Mupirocin **ointment** (rather than cream) applied to affected areas TDS (8 hourly) for 7 days is the preferred treatment for limited disease
- Oral antibiotics are indicated for more extensive disease and/or if the patient is systemically unwell

Choice of antibiotic should be guided by local sensitivity patterns and the child's likelihood of tolerating the antibiotic.
Options include:

Cephalexin	12.5 – 25 mg/kg/dose (depending on severity/extent of disease, to a maximum of 500mg) QID (6 hourly) for 10 days is generally recommended as first line oral therapy, for reasons of palatability
Flucloxacillin	12.5-25 mg/kg/dose (to a maximum of 500mg) QID (6 hourly) for 10 days is a reasonable alternative
Cotrimoxazole	**If MRSA (known or suspected) or immediate penicillin allergy:** 4mg/kg of Trimethoprim component BD (12 hourly) equivalent to 0.5mL/kg of mixture (maximum of 160mg Trimethoprim component per dose)
Benzathine Penicillin (Intramuscular)	**If high risk of Acute Rheumatic Fever or Post-Streptococcal Glomerulonephritis:** Intramuscular Benzathine Penicillin (refer to Therapeutic Guidelines for dosing) Children living in remote indigenous communities or with previous acute rheumatic fever (ARF) or poststreptococcal glomerulonephritis (PSGN) are at greatest risk

For further information see PMH ChAMP Empiric Guideline – Skin, Soft Tissue & Orthopaedic Infections – section on impetigo

Health information (for carers)

Hygiene Issues:

- Soap and water cleansing, air-drying whilst at home, use of child's own face wash towels, importance of hand washing etc
- These simple things may not be known by parents and should be reinforced prior to

discharge
- The use of disinfectant solutions or medicated soaps probably gives no advantage over plain soap and water and drying
- In recurrent cases associated with nasal and other site carriage, chlorhexidine body wash may be preferred, as part of a broad eradication regimen – consultation with Microbiology is recommended in this situation

School/Daycare Exclusion:

- School exclusion is until lesions are healed and crusted over and no longer weeping, or until 24 hours after commencing antibiotic (topical or systemic) treatment
- Whilst at school lesions on exposed areas should be covered with a waterproof dressing

Nursing

- Routine observations
- Contact precautions

Isolation

Single-room isolation is **NOT** required for skin infections.

Internal hospital links

ChAMP Empiric Guideline – Skin, Soft Tissue & Orthopaedic Infections – this includes a section on recurrent Staph infections and MRSA eradication antibiotic guide, see Impetigo section

MRSA Prescription for Patient Contacts – a printable sheet to guide prescription for contacts of MRSA patients at PMH

Tags

abrasions, antibiotic, bacterial, bite, bites, bullous, burns, cellulitis, chicken pox, contagious, crust, dermatitis, epidermis, erythematous macule, exclusion, exudate, fungal, herpes, hsv, impetigo, infection, infectious, insect, lacerations, lesions, mouth, mrsa, mupirocin, pox, pustule, pustules, rash, recurrent, scabies, skin, staph, staphylococcus, strep, streptococcus, swab, topical, trunk, vesicle

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