

Recurrent boils

- Commonest sites face, neck, armpits, shoulders, and buttocks (bottom)
- infection of the hair root or sweat pore
- Occur in otherwise healthy people (higher rates in diabetics, eczema, iron deficient)
- Caused by *Staphylococcus aureus*

Risk factors?

Insect bites?

Hygiene?

Household crowding

Health literacy

NZ – -we have high rates and highest in

- Maori and Pacific children
- Children from lower socioeconomic families
- Preschool children (also twice as likely to get hospitalised compared with 5-9yr olds)
- Boys
- Kids from urban areas and from northern NZ

1. O'Sullivan CE, Baker MG, Zhang J. Increasing hospitalizations for serious skin infections in New Zealand children, 1990-2007. *Epidemiol. Infect.* 2011;139(11):1794–804.
2. O'Sullivan C, Baker MG. Skin infections in children in a New Zealand primary care setting: exploring beneath the tip of the iceberg. *N. Z. Med. J.* 2012 March

Michael is a 6 year old boy from Manurewa - fell off his bike a week ago and had a minor abrasion to his leg.
He now has a boil which is very tender

- Your next action is
 - A) wound care and drainage of pus
 - B) Start flucloxacillin
 - C) Assess for MRSA risk factors
 - D) Start cotrimoxazole
 - E) Send off cultures and treat based on these in 48hours



BPAC guidelines 2011 *and just updated this month*

Most lesions may be treated with incision and drainage alone.

Antibiotics - consider if fever, cellulitis or co-morbidity, e.g. diabetes, or if the lesion is in a site associated with complications, e.g. face.

Antibiotic treatment First choice **Flucloxacillin**
500 mg, four times daily, for *seven to ten days*

Alternatives: **Erythromycin, co-trimoxazole**

Another oral option..

Cephalexin

- 1st generation cephalosporin
- Activity
 - Gram pos - Staph aureus and Strep pyogenes
 - Gram neg - if sensitive then E.coli, Moraxella, Haemophilus
- Cephalexin syrup 125mg/5ml or 250mg/5ml listed Dec 2009
- Cephalexin tablets 500mg listed May 2010
- For skin infections
 - adult doses - 500mg BD
 - Syrup dosing for skin and soft tissue infection
 - Medsafe 25-50mg/kg/day divided doses BD for skin
 - *Starship skin treatment 20mg/kg per dose BD*
 - *CMDHB Kidsfirst 40mg/kg/day 2-3 times daily*
 - Current school trial : Sth Auckland 25mg/mg /kg /day Div BD with daily review

Michael – boil now gone

A) What is his chance of getting another one?

He get another one; then goes on to have 2 more ...

Do you do a swab? Of what nose, armpit, groin

Do you swab the rest of his family?

Do you offer any treatment?

BPAC define recurrent as >10 boils over >3 mths

If recurrent boils then

- Attempt staphylococcal decolonisation (previously outlined as..)
 - Nasal antibiotic cream, triclosan wash and household hygiene measures
- Consider other household contacts and hygiene or decolonisation measures
- Swab nose and/or wound if no improvement
- Consider MRSA if there is a lack of response to flucloxacillin.

*BPAC 2012: Combination of bleach baths, intranasal antibiotics and education about personal and household hygiene did eradicate S.aureus nasal carriage**

Recipe for swimming pool bleach bath – ¼ cup of bleach added to bath 2-3x/week

*Fritz et al. Effectiveness of measures to eradicate Staphylococcus aureus carriage in patients with community-associated skin and soft-tissue infections: a randomized trial. Infect Control Hosp Epidemiol.

2011;32(9):872–80.

Decolonising household...

- Results from community paediatric study on kids with soft tissue infection plus positive for nasal, groin or armpit S.aureus
 - Child plus or minus family decolonised
 - 5 days of chlorhexidine daily wash
 - 5 days of BD daily mupirocin
 - Household hygiene measures
 - If entire household decolonised rather than child only

Less SSTI treated at end of a year

Michael's 2 year old brother

Has **recurrent superficial boils** over the last year (every 3-4 weeks)

Has well controlled eczema in separate site to the boils

Dad and brother have also had a couple of boils

What to do now?

Consider referral to Starship ID outpatients

- We will
 - usually do full blood count and blood glucose if not done already
 - Usually take wound and nasal swab
 - Usually have a more generous definition than BPAC
 - Recurrent “ >6 over 3 mths plus at least one needing surgical drainage or hospital attendance or persisting problems > 6 mths”

Recurrent boils - Starship ID outpatients

INDEX CHILD

Every 1 week in 4 treat with flucloxacillin three times daily plus rifampicin daily for 3- 6 months*

- Or cephalexin
- We do suggest decolonisation measures for whole family over the first week
 - nasal ointment BD over first plus either 3 times weekly janola baths or daily chlorhex washes and household hygiene

**Sweetman and Ellis-Pegler Treatment of recurrent staphylococcal furunculosis Medical J Aust 1992 156; 292*