The epidemiology of serious skin infections in New Zealand children: comparing the Tairawhiti region with national trends

Authors: O'Sullivan C et al

Summary: These researchers compared epidemiology data on serious skin infections among children in the Gisborne (Tairawhiti) region on the East Coast of New Zealand's North Island with equivalent national data, in an attempt to identify factors contributing to the consistently greater than average infection rates and significantly larger ethnic disparities in the Tairawhiti region. Hospitalisation data were reviewed for 0–14-year-old children in the Tairawhiti region discharged from hospital with a serious skin infection between 1990 and 2007; several demographic variables were compared to equivalent data for New Zealand cases over the same period. In Tairawhiti the age-adjusted incidence of serious skin infections increased from 641.1/100 000 in 1990–1999 to 988.4/100 000 in 2000–2007, while the New Zealand incidence increased from 354.3/100 000 to 531.7/100 000. In all regions, the highest infection rates were among preschool-aged children, Māori children, and those living in deprived neighbourhoods. The disparity between Māori and non-Māori children was significantly greater in Tairawhiti than nationally. The standardised ratio of observed to expected discharges in Tairawhiti compared with New Zealand was 1.42 (95% CI, 1.32 to 1.52) in 1990–1999 and 1.28 (95% CI, 1.19 to 1.36) in 2000–2007.

Comment: See below.


Serious skin infections in children: a review of admissions to Gisborne Hospital (2006–2007)

Authors: O’Sullivan C, Baker MG

Summary: Hospital charts were reviewed of all children aged 0–14 years in the Tairawhiti (Gisborne) region admitted with a serious skin infection to Gisborne Hospital between 1 January 2006 and 31 December 2007. Of the 163 documented cases, 83% occurred in Māori children. The most common types of infection were cellulitis (38%) and subcutaneous abscesses (36%), and the most frequent sites of infection were the head, face and neck (32%) and lower limbs (32%). A previous episode of skin infection was recorded in 34% of children, with previous hospitalisation in 12%. A skin injury preceded infection in 37% of cases, more than reported in the Auckland and Wellington regions. Of the 77% of children who saw a GP 60% required immediate hospital admission. Compared with figures from the Auckland region, there were longer delays to medical care with a mean duration of symptoms of 2.5 days prior to visiting a GP. The most frequently isolated organisms were Staphylococcus aureus (48%) and Streptococcus pyogenes (20%) with similar proportions and resistance patterns to other New Zealand settings.

Comment: See below.


Skin infections in children in a New Zealand primary care setting: exploring beneath the tip of the iceberg

Authors: O’Sullivan C, Baker MG

Summary: This article describes the epidemiology of childhood skin infections presenting to primary care in the Tairawhiti (Gisborne) region, compared to hospitalised cases during the same period. The 9 participating general practitioners recorded O'Sullivan C, Baker MG

Authors: O’Sullivan C, Baker MG

Summary: This article describes the epidemiology of childhood skin infections presenting to primary care in the Tairawhi...