

SORE THROATS AND ACUTE RHEUMATIC FEVER: ADVICE FOR GPS AND PRACTICE NURSES

Key Messages:

- Think differently about sore throats in different population groups.
- Acute rheumatic fever and rheumatic heart disease are serious problems in Maori and Pacific populations (especially children) in the Bay of Plenty and Lakes districts. 90% of all cases in the Bay of Plenty/Lakes are Maori.
- The annual incidence of acute rheumatic fever in Lakes District Health Board (22/100,000) is nearly double the New Zealand rate, and in the Bay of Plenty District Health Board (34/100,000) it is nearly three times the New Zealand rate.
- Maori and Pacific children in the Bay of Plenty and Lakes districts presenting with sore throats are at high risk of group A streptococcal infection which, if left untreated, can lead to acute rheumatic fever and chronic rheumatic heart disease.

Hotspots:

Parts of the Eastern Bay of Plenty, particularly the towns of Opotiki, Kawerau, Murupara and Whakatane West (between Hinemoa street and the river) have among the world's highest recently documented rates of acute rheumatic fever in children aged five -14 years (88-258/100,000).

In Rotorua high incidence areas are Ngapuna, Fordlands and Owkata.

- * **However, individuals living outside of the hotspots may still be at high risk depending on their circumstances.**

Recommended Action:

- **All Maori and Pacific children aged three years and over from anywhere in the Bay of Plenty or Lakes who present with a sore throat should have a throat swab taken.** In addition, antibiotics should be given empirically if any of the following are present:
 - T >38°C
 - no cough
 - anterior cervical lymphadenopathy
 - tonsillar swelling or exudate.

If none of these features are present wait for a positive group A streptococcal throat swab result before starting antibiotics.

- Suitable antibiotics include penicillin V or amoxycillin. Use erythromycin (EES) if penicillin allergic.
- Antibiotics must be given for 10 days.

Algorithm:

An excellent National Heart Foundation guideline/algorithm providing more detailed information, including dosages, on managing sore throats can be found on <http://www.nhf.org.nz/index.asp?pageID=2145850722>

Refer to Hospital:

- Suspect acute rheumatic fever if a Maori or Pacific child (highest risk at 5-14 years of age) presents with fever and arthritis/arthralgia and/or a murmur, particularly if there is a history of a recent sore throat. Other rarer features may include chorea, erythema marginatum or subcutaneous nodules more information is available at http://www.toiteorapublichealth.govt.nz/Rheumatic_Fever_GP1
- Refer any suspect case to hospital early.

Background:

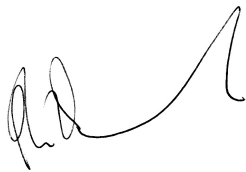
Acute rheumatic fever and rheumatic heart disease remain serious preventable causes of morbidity and mortality in New Zealand, with rates for Maori and Pacific in many areas similar to those in developing countries.

Recent cases of acute rheumatic fever have occurred in patients who had presented to primary care with a sore throat but did not receive antibiotics. This highlights that doctors need to think differently about sore throats in different population groups.

Acute rheumatic fever is still all too common in certain populations (Maori and Pacific children living in relatively deprived areas are at highest risk) and can be prevented by appropriate sore throat management. While sore throats are commonly viral in children of European descent, and in adults, group A streptococcus is still a very important cause in Maori and Pacific children. Many cases are preventable and many more are likely to go undiagnosed. Twice as many deaths occur from rheumatic heart disease as from cervical cancer each year in New Zealand.

For further information on rheumatic fever please download the recently published National Heart Foundation Guidelines on <http://www.nhf.org.nz/index.asp?pageID=2145846025>

Or visit the Toi Te Ora – Public Health website, http://www.toiteorapublichealth.govt.nz/rheumatic_fever_gp



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