Rheumatic Fever and sore throat management

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Overview

- Rheumatic Fever (RHF)
- Group A Streptococcal (GAS) Infections
- Resources and links
Rheumatic Fever

• RHF mostly eradicated in developed nations

• NZ still has high rates of RHF, disproportionately affecting Maori and Pacific families

• RHF can result in damaged heart valves, decreased life expectancy and loss of life

RHF is completely preventable by correct detection and treatment of GAS sore throats
Who is most at-risk?

- Māori and Pacific families
- Aged 4 - 19
- Families who have had rheumatic fever
- Families who live in houses with lots of people
How does rheumatic fever affect the body?

Acute rheumatic fever affects 3 organ systems

- Brain
- Heart
- Joints (arthritis)
How does a sore throat cause heart damage?

GAS throat infection

(0.3 – 3%) <9 Days

Acute Rheumatic Fever

80%

- sore or swollen joints
- a skin rash
- a fever
- stomach pain
- fatigue
- jerky movements

Damaged heart valves/carditis
How does Rheumatic Fever affect children’s lives?

- Secondary prophylaxis – 13 injections (one every 28 days)/year
- Education – DN once a month
- Dental Review – twice a year
- Authority completed once a year
- Details updated on register once a year
- Clinic reviews
- Echocardiography - variable depending upon severity
- Influenza vaccine for medium to high risk - annually
- Pneumococcal vaccine recommended for medium or high risk – 5 yearly
- Enrolled with PHO
What do we know about sore throats?

- Most sore throats are caused by a virus or a bacteria and go away in a few days
- Sore throats caused by group A streptococcal (GAS) bacteria can lead to Rheumatic Fever – particularly in high risk populations
- Only a throat swab can tell if the GAS bacteria is present

If a Maori or Pacific child or young person complains of a sore throat make sure they have a throat swab taken
What do we know about strep throats?

**GAS sore throat:**
- Bacteria
- Can cause RHF

Symptoms of GAS sore throat can include:
- Sore red throat
- Pus like fluid around tonsils
- Fever and chills
- Swollen, sore lymph nodes around the neck
- Vomiting and sore stomach, especially in children
Preventing spread of GAS sore throats

Droplet spread

Spread through:

- Coughing and sneezing
- Unwashed hands
- Sharing toothbrushes
- Sharing drinks and kai

Prevented by:

- Hand hygiene
- Covering mouths
- Prompt treatment of GAS
Treating Strep Throat

A quick throat swab

Child needs to take the full 10-day course of oral antibiotics to eradicate and kill GAS

Options:
- Amoxyl - OD – 10 days
- Erythro – option for allergy to Amoxyl
- IM Penicillin – once only - adherence tool, given with lignocaine

A/Bs for GAS +ve
(approx 20% of throat swabs = GAS+ve)
Intramuscular penicillin

- Given with lignocaine
- Once only
- No risk of forgetting
- Eradicates GAS (for up to 28 days)

Ministry of health guidance:
Patient Education

Make it easy for high risk patients to come back

- Praise their attention to sore throats
- Stress importance of not ignoring symptoms
- Educate clients and whanau that ‘Sore throats Matter’
- Check for other household members with sore throats
- Contact details for community swabbers
Support for adherence

All the work that goes into swabbing and following up is wasted if antibiotics are not completed!

ABC of health literacy:

• Assess current knowledge
• Build on that knowledge
• Check for understanding
Support for adherence

1. Assess for ability to return for antibiotics
2. Assess for ability to complete course
   - single dose of IM Benzathine penicillin
3. Consider reminder devices - scratchy charts, phone call/txts
4. Consider widening reminders
5. Invite wider family groups to attend
Resources

Waikato DHB Rheumatic Fever site:
- https://www.waikatodhb.health.nz/for-health-professionals/rheumatic-fever

Ministry of Health

National Heart Foundation
Online learning modules


• Rheumatic Heart Disease Australia e-learning modules: http://www.rhdaustralia.org.au/e-learning-discussion-forum
RHF Contacts and Links

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References


