Rheumatic Heart Disease

Rheumatic heart disease is chronic damage to the heart valves caused by single or repeated episodes of acute rheumatic fever. Acute rheumatic fever is a disease caused by the bacteria group A Streptococcus and causes throat and skin infections which lead to inflammation in the joints, brain and heart. The bacteria can cause an autoimmune response in the body that leads to damage to one or more of the heart valves. This can result in the heart valves not functioning properly which may require heart surgery. If untreated, rheumatic heart disease can lead to heart failure and complications like stroke, and can greatly reduce the ability to lead a normal life.

Aboriginal and Torres Strait Islander peoples living in urban settings, Maoris and Pacific Islanders and potentially immigrants from developing countries, may be at particularly high risk.

Signs and Symptoms:

Signs and symptoms of rheumatic heart disease may not be noticed for many years. When they do develop they are dependent on how severe the damage to the heart valves is and can include:

- shortness of breath
- chest pain
- swelling of the legs and face
- weakness or tiredness
- fainting
- heart palpitations
- heart murmur.

Treatment:

The goal of treatment for rheumatic heart disease is to prevent further episodes of acute rheumatic fever occurring which worsen the heart valve damage. The only effective control strategy for rheumatic heart disease is regular secondary prophylaxis with an antibiotic called Bicillin (benzathine penicillin G). Compliance with antibiotic treatment is crucial to the effectiveness of preventing further damage to the heart.

Prevention:

3–4-weekly injections of antibiotics continued for many years are the most important measure to prevent further episodes. A Rheumatic Heart Disease Register and Control Program has been established in Queensland to, in collaboration with healthcare providers, coordinate the long-term management of patients with acute rheumatic fever and rheumatic heart disease.

Some of the methods to reduce the incidence and impact of rheumatic heart disease include:

- Prevention and early treatment of group A Streptococcal infections of the throat and skin with antibiotics
- Secondary prophylaxis (to prevent further episodes of ARF) with regular antibiotic injections (Bicillin)
- Reducing symptoms and minimising disability associated with rheumatic heart disease, through medications and sometimes surgery.

Health outcome:

Each episode of acute rheumatic fever increases the chance of damage to the heart valves, thereby increasing the risk of, or worsening of existing, rheumatic heart disease. This leads to worsening heart failure as well as increased risk of complications such as abnormal heart rhythm, stroke and infection and inflammation of the heart tissue. Severe damage to the heart valves can require surgery to fix or replace the affected valves.

Other resources:

For further information contact your healthcare provider and visit RHD Australia. (https://www.rhdaustralia.org.au/)

Related Content

RHD Australia (ARF/RHD writing group), National Heart Foundation of Australia and the Cardiac Society of Australia and New Zealand. 