

- CRP
- Prolonged PR interval

Supporting Evidence of Antecedent Group A Streptococcal Infection

Positive throat culture or rapid streptococcal antigen test result

Elevated or rising streptococcal antibody titer

CRP, C-reactive protein; *ECG*, electrocardiogram; *ESR*, erythrocyte sedimentation rate.

*If supported by evidence of preceding group A streptococcal infection, the presence of two major manifestations or of one major and two minor manifestations indicates a high probability of acute rheumatic fever.

From Guidelines for the diagnosis of rheumatic fever, Jones criteria, 1992 update, Special Writing Group of the Committee on Rheumatic Fever, Endocarditis, and Kawasaki Disease of the Council on Cardiovascular Disease in the Young of the American Heart Association, *J Am Med Assoc* 268(15):2069–2073, 1992.

Children suspected of having ARF are tested for streptococcal antibodies. The most reliable and best standardized test is an elevated or rising **antistreptolysin O (ASO or ASLO) titer**, which occurs in 80% of children with ARF. Additional antistreptococcal antibody titers may be sent if ASO titers are negative. Acute-phase reactants, ESR, and C-reactive protein (CRP) are usually elevated as well. Echocardiograms play an important role in diagnosing RHD and monitoring deteriorating valve function.

Therapeutic Management

Primary prevention involves prompt diagnosis and treatment of strep throat infections so that ARF does not occur. Penicillin is the drug of choice or an alternative in penicillin-sensitive children ([Gerber, Baltimore, Eaton, et al, 2009](#)).

If children have ARF, antibiotics are given to treat the GAS infection and salicylates are used to control the inflammatory