

onset). At the end of this stage, the child has regained his or her usual temperament, energy, and appetite.

Cardiac Involvement

Long-term complications of Kawasaki disease include the development of coronary artery aneurysms, potentially disrupting blood flow. Children with large (giant) aneurysms have the potential for myocardial infarction, which can result from thrombotic occlusion of a coronary aneurysm or late-stenosis of the same vessel.

Affected coronary arteries dilate progressively, reaching their maximal diameter approximately 1 month from the onset of fever. Over time, as the damaged vessel tries to heal, stenosis of the aneurysm may develop and may lead to myocardial ischemia. Most of the morbidity and mortality occur in children affected with the largest aneurysms (giant aneurysms >8 mm or z-score >10). Symptoms of acute myocardial infarction in young children can be confusing and may include abdominal pain, vomiting, restlessness, inconsolable crying, pallor, and shock, as well as chest pain or pressure (noted more in older children). In the initial phase of the illness, children with Kawasaki disease may have signs or symptoms related to inflammation of the myocardium, including myocarditis, valvulitis, or arrhythmias.

Echocardiograms are accurate in assessing coronary artery dilation and are used to monitor coronary artery dimensions, myocardial function, and valvar function. A baseline echocardiogram should be obtained at the time of diagnosis and is used for comparison with future studies, which are obtained at 1 week after the initial diagnosis and again at 4 to 6 weeks later. Additional echocardiograms should be done (often as frequently as twice a week) in situations where a child has coronary artery dilation or obvious aneurysm formation or when response to treatment is incomplete.

Therapeutic Management

The current treatment of children with Kawasaki disease includes high-dose intravenous immunoglobulin (IVIG) along with salicylate therapy. IVIG has been demonstrated to be effective at reducing the incidence of coronary artery abnormalities when given