KAWASAKI DISEASE

INTRODUCTION

Kawasaki Disease (KD), also known as mucocutaneous lymph node syndrome, is a multisystem inflammatory disease of childhood. It most commonly presents in children under the age of two, however has been seen up to 12 years of age. Diagnosis can be difficult, as the classic signs and symptoms may not all manifest and the presentation may mimic other causes of fever and rash. Although many organs may be affected, those related to the cardiac system are the most concerning and persistent. Coronary aneurysms have been reported to occur in up to 20% of untreated children with KD. If diagnosed and treated promptly, the cardiac complications can be reduced. Therefore, it is important that pediatric hospitalists have a complete understanding of the diagnostic criteria and treatment of KD.

KNOWLEDGE

Pediatric hospitalists should be able to:
- Discuss current established criteria and guidelines for diagnosis and treatment.
- Define incomplete KD and note age groups in which this is more common.
- List the broad categories of alternate diagnoses, and give examples from each.
- Discuss the appropriate laboratory and imaging studies that aid in diagnosis.
- Explain the pathophysiology of the disease, including the current understanding of development and manifestation of cardiac complications.
- Define refractory KD and the list factors that indicate the need for further treatment.
- Describe current best practice treatments, including approach toward persistent fever.
- Compare and contrast the risks, benefits, and side effects of available treatments such as immunoglobulin, steroids, anti-platelet medications and immunomodulators.
- Cite risk factors associated with increased cardiac complications.
- Discuss the immediate and long term follow-up needed including impact, if any, on physical activity and sports participation.
- List appropriate discharge criteria for KD.

SKILLS

Pediatric hospitalists should be able to:
- Correctly diagnose KD by efficiently performing an accurate history and physical examination, determining if key features of the disease are present.
- Promptly consult appropriate subspecialists to assist in evaluation and treatment.
- Correctly interpret laboratory and imaging results.
- Recognize features of alternate diagnoses and order relevant diagnostic studies as indicated.
- Perform careful reassessments daily and as needed, note changes in clinical status and respond with appropriate actions.
- Initiate prompt treatment once the diagnosis is established.
- Anticipate and treat complications and side effects of instituted therapies.
- Identify treatment failure and institute appropriate repeat or alternate therapy.
- Demonstrate basic proficiency in reading electrocardiograms.
- Coordinate care with subspecialists and the primary care provider, and arrange an appropriate transition and follow-up plans for after hospital discharge.

ATTITUDES

Pediatric hospitalists should be able to:
- Communicate effectively with patients, the family/caregiver, and other healthcare providers regarding findings and care plans.
- Educate patients and the family/caregiver on the natural course of disease.
- Collaborate with subspecialists and the primary care provider to ensure coordinated longitudinal care for children with KD.
SYSTEMS ORGANIZATION AND IMPROVEMENT

In order to improve efficiency and quality within their organizations, pediatric hospitalists should:

- Lead, coordinate or participate in early multidisciplinary care to promote efficient diagnosis, treatment and discharge of patients with KD.
- Work with hospital staff and subspecialists to educate other healthcare providers regarding the diagnosis and treatment of KD.
- Lead, coordinate or participate in community education efforts regarding KD.