

00517 Kawasaki Disease and Concomitant Adenovirus Infection

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Aims: Kawasaki Disease (KD) is the leading cause of acquired heart disease in children and hence, requires prompt recognition and treatment. KD shares clinical features with many viral infections, including Adenovirus infections, which share the most similar clinical and laboratory characteristics with KD. As shown in recent studies, KD and Adenovirus infection can co-exist in the same patient, making the diagnosis clinically challenging. However, little has been described of the clinical characteristics and management of patients with both diseases.

Methodology: From 1st June 2013 to 11th March 2018, 1240 patients with Adenovirus infection and 791 with KD were admitted into KK Women's and Children's Hospital. Cases with KD and concomitant Adenovirus infection were identified from the inpatient registry of the Paediatrics Infectious Disease Service. An Adenovirus infection is confirmed in patients with a positive nasopharyngeal aspirate for Adenovirus on immunofluorescence or polymerase chain reaction. Patient demographics, clinical characteristics, treatment received and outcomes for these cases were extracted from electronic medical records and clinical notes. The laboratory indices between patients with coronary artery dilatation and those without were then compared using the Mann–Whitney U test.

Result: There were 16 cases identified in this time period, with a median age of 27 months (range: 7 to 73 months). All patients were treated with intravenous immunoglobulin (IVIg). One patient had a very high Adenovirus viral load, and received 2 doses of IVIg as well as intravenous cidofovir, with good response to the combined therapy. Analysis of laboratory characteristics showed both highest white blood cell counts and highest absolute neutrophil counts were predictors of coronary artery dilatation.

Conclusion: It is important to manage both KD and Adenovirus infections when they co-exist in patients. Further studies would be beneficial in exploring better management of such patients.