

**The Relation of IVIG Resistance, Laboratory Findings and Coronary Complications in Patients with Kawasaki Disease**

*Cetin I. (1), Kazmacan T (2), Ari M.E. (1), Aktas D. (1), Kocabas A. (1), Ekici F. (1), Cakar N. (2)  
Ankara Child Health, Hematology Oncology Education and Research Hospital, Pediatric Cardiology  
(1), Pediatrics (2), Ankara, Turkey*

**Abstract**

**Objectives:** The aim of this study is to evaluate the cases diagnosed with KD in our hospital.

**Methods:** We retrospectively analyzed the medical records of 31 patients, ranging from 3 months to 7 years of age who were admitted to our hospital between January 2007-June 2013 and diagnosed as KD according to EULAR/PrES criteria. The epidemiological, clinical, laboratory and echocardiographic findings; treatment and follow-up results of the cases were evaluated.

**Results:** The male/female ratio was 1,81. Median age was 24 months and 90,3 % of cases were under 5 years of age. The median duration of illness at diagnosis was 7 (5-21) days. 22,6 % of cases were diagnosed at subacute stage. 54,8 % of cases were incomplete KD. 41,2 % of incomplete cases were diagnosed after 10 days ( $p=0,009$ ). Conjunctivitis, oropharyngeal changes, changes in extremities and rash were significantly more common in classical cases ( $p < 0,05$ ). Coronary artery ectasia or aneurysm were identified in 8 cases (25,8 %), all of these cases were male ( $p=0,028$ ). 20 % of cases received IVIG after 10 days of illness and coronary artery involvement was 57,1 % in these cases ( $p=0,05$ ). IVIG resistance was seen in 23,3 % of cases and these cases received second dose of IVIG therapy. High C-reactive protein levels ( $p=0,017$ ), high platelet levels ( $p=0,043$ ) and low albumin levels ( $p=0,014$ ) were related to IVIG resistance. The coronary artery ectasias resolved in all cases. In one of the cases with multiple giant aneurysms, the aneurysms regressed but the other case resulted in thrombosis, obstruction and finally death.

**Conclusions:** There is relation between IVIG resistance and laboratory values. So, supporting the clinical suspicion with laboratory and echocardiographic findings to diagnose and treat especially the incomplete cases earlier is important in preventing the cardiovascular complications of this disease.

**Keywords:** IVIG, incomplete, Kawasaki disease, coronary artery aneurysm, resistance