Kawasaki disease in Germany: A nationwide survey of 202 children

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Introduction: Kawasaki disease (KD), an acute febrile illness of unknown aetiology, is most common in children of Asian origin, but affects all ethnic groups. Incidence, age distribution, course and complication rate in Germany is unknown.

Methods: Prospective study of the German surveillance unit for rare paediatric diseases (ESPED) of children (<5 years) with KD, treated with iv Immunoglobulins (IVIG).

Results: 1/2011 – 9/2012 there were 202 patients (137 male) with KD. We found a significant peak incidence during winter, but no difference in age distribution. Compared to older children, infants <1 year significantly less developed the complete form of KD (47,5% (19/40) vs. 74,7% (121/162); p=0,007), especially cervical lymphadenopathy, and enanthema were missing. Instead in this age group hematological disorders (e.g. anemia: 65% (26/40) vs. ≥ 43,2% (70/162), p<0,02) and coronary artery aneurysms (30% (12/40) vs. 12,3% (20/162) p=0,0082) were more frequent. There was no difference in time to first IVIG-treatment initation. 49 patients received a second course of IVIG and 18 patients were additionally treated with steroids. However, these patients did not indicate an increased rate of coronary artery aneurysms.

Conclusions: Infants < 1 year present in the acute state of Kawasaki disease with fewer clinical symptoms. In contrast, hematological parameters were more frequently pathologically altered. The higher incidence of coronary artery aneurysms in this age group needs to be taken into account in the cardiological follow-up.