

How much IVIG dose is optimum for low risk cases of Kawasaki disease?

Yoshikane Y. (1), Hashimoto J.(1), Hirose S.(1)

Department of Pediatrics, Faculty of Medicine, Fukuoka University, Fukuoka, Japan (1)

Background: In the guideline from the American Heart Association of 2004, patients of Kawasaki disease (KD) should be treated with 2 g/kg IVIG in a single infusion for initial treatment. In Japan, more than 80% KD patients receive 2g/kg IVIG in a single infusion. In the Japanese Society of Pediatric Cardiology and Cardiac Surgery guideline of 2012, administration of 1g/kg IVIG for 1 or 2 days is also approved as a modified procedure. In fact we often have experience of success in only 1g/kg IVIG. Objective: To evaluate efficacy and safety of starting initial treatment with 1g/kg IVIG for low risk cases. Subjects and Methods: We defined those who have low scores in the three major Japanese prediction scoring systems as a low risk patient. From January 2012 to October 2015, a total of 108 hospitalized low risk patients excluding those patients who did not receive IVIG (n=6) were enrolled. The patients were separated into two groups. Group 1 (n=78): who started initial treatment with 1g/kg IVIG and Group 2 (n=30): who were administered 2g/kg IVIG in a single infusion. Clinical data, clinical course, and circumstances of additional therapies were compared. Results: There were 115 low risk patients out of the total 213 KD patients (54%). There were 47 patients who finished treatment with only 1g/kg IVIG in Group 1 (60%). There were 8 patients who required another 1g/kg IVIG more than 2 days after (10%), and 23 patients who required 1g/kg IVIG for 2days in a row (29%) in Group 1. There were 8 patients in Group 1 who required additional treatment (10%) and 4 patients in Group 2 (13%). The day of discharge of those who required a total 2g/kg IVIG for initial treatment in Group1 was day 13 which was almost the same as that in Group 2. No patient had coronary region. Conclusions: More than half of KD patients are low risk cases. More than half of patients do not need 2g/kg IVIG in low risk cases. It may be effective and safe to start initial treatment with 1g/kg IVIG for low risk patients.