Clinical utility of Egami score system in patients with Kawasaki disease to predict coronary artery abnormality

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Background: The Egami score is used to predict responsiveness to initial intravenous immunoglobulin (IVIG) in patients with Kawasaki disease (KD). However, clinical utility of predicting coronary artery lesions (CAL) is unclear. Methods: This study included 156 patients with KD who were treated at Kitasato University. We investigate the clinical utility of Egami score system for predicting CAL before IVIG treatment. The Egami score system use age, days of illness, platelet count, C-reactive protein, and alanine aminotransferase level to identify IVIG-resistant patients before treatment (cut off: 3 points; 78% sensitivity and 76% specificity). Patients were divided into 2 groups using Egami score: group A (≤ 2 points) and group B (≥ 3 points). Coronary artery Z-score was evaluated in the left main trunk (LMT), left anterior descending artery (LAD), and right coronary artery (RCA) before initial treatment and at 1 month after treatment. The p values were corrected by using Student’s t test. Results: The coronary artery Z-score in group B was significantly higher than that in group A before initial treatment and at 1 month after treatment (p<0.05 for LMT, LAD, and RCA). Conclusions: The Egami score predicted coronary artery abnormalities before initial treatment and might predict coronary artery outcomes.