

Comparison of C-reactive Protein Improvement in Sulfonated and pH4 Treated Acidic Human Normal Immunoglobulin Treatments for Kawasaki Disease

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Abstract : We administered intravenous human immunoglobulin (IVIG) at a dose of 1g/kg/day in the acute phase of Kawasaki disease and observed changes in C-reactive protein (CRP) before and after administration. We used two human immunoglobulin preparations ; namely, freeze-dried sulfonated human normal immunoglobulin (group S) and pH4 treated acidic human normal immunoglobulin (group P), and compared the two preparations. Decreases in CRP were observed in 41 patients (20 in group S, 21 in group P). Neither adverse reactions nor coronary artery aneurysm developed in any patients. The efficacy of the therapy was estimated by the decrease in CRP on day three in comparison to that before the treatment. CRP reduced the value in group P was 26.27 ± 18.49 : significantly lower than 41.18 ± 18.82 in group S ($P=0.015$). In the acute phase treatment of Kawasaki disease, pH4 treated acidic preparation provided a higher degree of improvement in CRP than freeze-dried sulfonated preparation. Therefore, pH4 treated acidic preparation is expected to be faster acting for an improvement of CRP.

Key words : Kawasaki disease, Intravenous immunoglobulin therapy, Degree of improvement of CRP, Freeze-dried sulfonated immunoglobulin, pH4 treated acidic immunoglobulin