Comparison of High-Dose *versus* Low-Dose Aspirin in the Management of Kawasaki Disease

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To the Editor: Kawasaki disease (KD) is a vasculitis of an unknown origin, involving the small and medium size vessels [1, 2]. Standard treatment for acute phase of KD introduced by American Heart Association (AHA) and American Academy of Pediatrics (AAP) includes intravenous immunoglobulin (IVIG) therapy with a single dose of 2 g/kg plus oral administration of aspirin at high-dose of 80–100 mg/kg/d [3, 4].

During the acute phase of Kawasaki disease, Group 1 (control group), consisting of 27 children, received aspirin at a daily dose of 80–100 mg/kg/d for 14 d after the onset. High-dose aspirin was then changed to low-dose (3–5 mg/kg/d) for another 6–8 wk. Group 2 (study group) consisting of 42 children received aspirin at a daily dose of 3–5 mg/kg/d for 8–10 wk if no coronary artery aneurism was observed in echocardiography. All patients also received the standard IVIG therapy with a single dose of 2 g/kg.

The mean duration of fever after the therapy was 41.96 ± 19.63 h in Group 1 and 46.00 ± 50.49 h in Group 2 ($P=0.694$). Persistent fever was observed in 14.8 % of cases in Group 1 and 11.9 % of cases in Group 2 ($P=0.729$). Duration of the hospital stay was 6 ± 1.3 d in Group 1 and 6.36 ± 2.80 d in Group 2 ($P=0.540$). There was 1 (4 %) and 2 cases (5.3 %) of

new coronary artery aneurism (CAA) formation in Group 1 and Group 2 respectively ($P=1.000$).

The logic behind the use of aspirin regimen in KD is the probable benefits of its anti-inflammatory and anti-platelet effects at high and low dosages respectively [5]. According to the result of this study, it is most likely that the anti-inflammatory dosage of aspirin has no advantage over the anti-platelet dosage regarding the duration of fever and days of hospital stay. This study was not powered enough to assess the differences between the two regimens regarding the CAA formation. Further studies with higher number of cases are needed to compare the effectiveness of high and low doses of aspirin in preventing CAA formation.

Conflict of Interest None.

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