

Background: The treatment strategy of administering early high-dose aspirin (ranging from 30–80 mg/kg/day) along with IVIG for Kawasaki disease is widely practiced. However, the high dose aspirin is associated with significant side effects and may not confer a benefit in terms of outcome i.e prevention of coronary artery aneurysms as per few cohort studies.

Question: What are the advantages and disadvantages of low dose aspirin < 10 mg/kg/day when compared with high dose aspirin > 30 mg/kg/day in the treatment of early phase of Kawasaki disease?

Methods: Systematic review and meta-analysis Eight studies (with a total of 12176 cases : 2497 in the low-dose aspirin group and 9679 in the high-dose aspirin group) were included for this meta-analysis.

Primary outcome: Incidence of coronary artery abnormalities (coronary artery dilation, coronary artery aneurysm(CAA),giant CAA) diagnosed by Echocardiography.

ACADEMIC P.E.A.R.L.S

Pediatric Evidence And Research Learning Snippet



Low Dose Aspirin in Kawasaki Disease: Is it Effective?

“ What dose of aspirin should be used in the initial treatment of Kawasaki disease? A meta-analysis” Rheumatology 2020;59:1826-1833

Results:

- No significant difference in the incidence of CAAs: high dose (>30mg/kg) & low dose (<10mg/kg) aspirin groups [RR 1.15; 95% CI:0.93, 1.43;P=0.19].
- High-dose aspirin group had a significant shorter duration of fever (MD,0.30; 95% CI:0.58, 0.02;P = 0.04)
- Rates of IVIG resistance & duration of hospital stay were comparable in two groups

Conclusions:

IVIG plus high-dose aspirin might have no preventive effect on CAAs when compared to IVIG plus low-dose aspirin.

Key message:

Low-dose aspirin is as effective as high-dose aspirin in the initial treatment of Kawasaki disease, in terms of preventing CAA.

EXPERT COMMENT



“IVIG plus low dose aspirin may be considered for initial management of Kawasaki disease. The results of this meta-analysis should be further tested in randomised controlled trials, before a consensus is reached”

Dr. Narendra Kumar Bagri, MD
Associate Professor, Pediatric Rheumatology
Department of Pediatrics, AIIMS, New Delhi.

DR MANINDER S DHALIWAL

Editor – Academic Pearls
pedpearls@gmail.com

DR BAKUL JAYANT PAREKH

National President 2020

DR G.V. BASAVARAJ

Hon. Secretary Gen. 2020-21

Reference

Reference : Xinyi Jia , Xiao Du, Shuxian Bie, Xiaobing Li, Yunguang Bao and Mizu Jiang. What dose of aspirin should be used in the initial treatment of Kawasaki disease? A meta-analysis. Rheumatology 2020;59:1826–1833. DOI:10.1093/rheumatology/keaa050