Indian Journal of Pediatrics (July 2022) 89(7):737
https://doi.org/10.1007/s12098-022-04131-1

CORRESPONDENCE

Cholestatic Jaundice as Atypical Initial Feature of Kawasaki Disease

Xinxin Zhu[1] · Jia Fu[1] · Yarong Yang[1]

Received: 7 November 2021 / Accepted: 24 January 2022 / Published online: 11 March 2022

To the Editor: The diagnosis of Kawasaki disease (KD) is based on clinical criteria and there exist no specific diagnostic laboratory tests [1]. Although KD is the common acute febrile disease in children, especially in Asia [2–4], seldom is the cholestasis reported as the initial feature of KD.

We report 7 children who presented atypical onset of KD with acute febrile cholestatic jaundice as initial feature. The average age was 3 y. Jaundice occurred within 3 d, and 2 cases occurred on the first day. The median of total bilirubin, direct bilirubin, aspartate aminotransferase, gamma glutamyl transferase, and the mean of alanine aminotransferase were 4.84 mg/dL, 3.87 mg/dL, 72 U/L, 146.53 μmol/L, 171.7 U/L, respectively. In addition to the increased inflammatory indexes in all, we found that triiodothyronine decreased in all cases, and free triiodothyronine decreased in 6 of them. Coronary artery abnormalities (3 dilatation) and abdominal abnormalities (2 gallbladder volume increase and 1 bile duct wall thickening) were detected by ultrasonography.

All patients were diagnosed with classical KD and treated with IVIG and oral acetylsalicylic acid. Two of them had IVIG resistance; one was given the second IVIG treatment and the other recurrent patient was given infliximab treatment. Except for the 2 patients of IVIG-refractory KD, the liver biochemical indexes of the remaining 5 patients improved or even returned to normal within 48 h after conducting IVIG treatment, and all of them returned to normal within 1 wk. After the second IVIG and infliximab were given to 2 patients with IVIG-refractory KD, the liver biochemical indexes returned to normal within 4 d.

Pediatricians should be aware that febrile cholestatic jaundice may be the atypical first symptom of Kawasaki disease, and liver function usually improves or even returns to normal within 1 wk after effective treatment of KD.

Declarations

Conflict of Interest None.

References

1. Newburger JW, Takahashi M, Burns JC. Kawasaki disease. J Am Coll Cardiol. 2016;67:1738–49.
2. Taddio A, Pellegrin MC, Centenari C, Filippeschi IP, Ventura A, Maggiore G. Acute febrile cholestatic jaundice in children: keep in mind Kawasaki disease. J Pediatr Gastroenterol Nutr. 2012;55:380–3.
3. Sadeghi P, Izadi A, Mojtahedi SY, et al. A 10-year cross-sectional retrospective study on Kawasaki disease in Iranian children: incidence, clinical manifestations, complications, and treatment patterns. BMC Infect Dis. 2021;21:368.
4. Medeiros R de Magalhães C, Coutinho de Almeida F, Gandolfi L, et al. Clinical manifestations of Kawasaki disease at different age spectrum: a ten-year study. Medicina (Kaunas). 2020;56:145.

✉ Yarong Yang
yyr20190101@126.com

[1] Department of Infection, Xi'an Children's Hospital, The Affiliated Children's Hospital of Xi'an Jiaotong University, Xi'an, Shaanxi 710003, China