

## Kawasaki Disease: Paraclinical Evolution and Clinical Outcomes of Iranian Patients

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### Dear Editor,

It is well known that Kawasaki disease (KD) is a small to medium vessel vasculitis that affects children six months to four-years-of-age. Diagnosis is based on clinical criteria mostly from the affected skin and mucosa (1). It was very interesting that Sedighi et al. and Soleimani et al. in their recent publications in the Journal of Comprehensive Pediatrics revealed the clinical characteristics of Kawasaki disease, and the liver and renal paraclinical abnormalities, respectively, of this condition in the Iranian population (2, 3).

In the study of Sedighi et al., 74 patients less than five-years-of-age were discharged with a diagnosis of KD, from 2004-2013, at the Besat Hopsital, Hamadan. Among these patients, in 44 (59.5%) a diagnosis of complete KD was made, while in 30 patients (40.5%) they were diagnosed as incomplete KD. Conjunctivitis (79%) was the most prevalent characteristic, followed by finger desquamation in 54% of patients, leukocytosis in 49.3%, and cervical lymphadenopathy in 40% of patients. Peripheral erythema was the least commonly seen clinical characteristic. Despite the accurate treatment, according to the American Heart Association guidelines, coronary artery aneurysm developed in 11 (14.8%) patients and one possible explanation might be the high frequency of incomplete KD diagnosis in comparison with other studies (2).

Soleimani et al. in their study determined the frequency of liver and renal abnormalities in a study of 47 patients with KD in the Ali-Ebne-Abitaleb Hospital, Zahedan, for the period 2006-2013. According to this study, liver involvement was very common and 46.8% of the patients were affected. The manifestations of hepatic involvement included; gallbladder hydrops, cholestatic hepatitis, and

asymptomatic increase of liver enzymes. The last one was the most frequent, affecting 42% of the patients in this study and this is very close to other medical reports.

Renal involvement is not as frequent as liver impairment, but it is estimated to affect 38.3% of patients and sterile pyuria seems to be the major manifestation (36.2%) of renal involvement. In the Sedighi et al. study, the percentage of pyuria was 20.2% and the difference from the usual frequency, which is usually found in 33-63% of patients, might be explained by the fact that pyuria is a transient symptom and urine analysis should be repeated in suspected patients (2-4).

In light of these observations, we should consider that Kawasaki Disease might not fulfill all the criteria, therefore, it is essential to recognize incomplete KD in order to treat the condition properly and to avoid the complication of coronary artery aneurysms. Conjunctivitis and finger desquamation seem to be the most important clinical manifestations of a sick child who has KD.

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