

# KAWASAKI'S DISEASE AND SARS-COV-2: AN UNEXPECTED PEDIATRIC GLOBAL CRISIS?

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## BACKGROUND

Infection with the SARS-CoV-2 virus can lead to a condition that usually leads to dyspnea, edema, deposition of intra-alveolar fibrin, thrombosis, and hemorrhages. With the increase in cases of COVID-19, several questions were raised about the risks for the pediatric population, which, until then, seemed to be relatively safe, with mild symptoms and rapid recovery. However, there have been reports of a relationship between COVID 19 and Kawasaki-like inflammatory disease in this population. Kawasaki disease (KD) itself is a vasculitis prevalent in childhood, characterized mainly by diffuse inflammation of the arteries associated with skin rash, changes in the mucosa and its main complication are coronary aneurysms.

## METHODS

A bibliographic review was carried out on the PubMed database on May 17, 2020 using the descriptors "Kawasaki disease", "COVID-19" and "Pediatrics". The selected filters were "Case reports", "Multicenter study", "Clinical Study", "Observational study", "Human" and "English". The exclusion criterion for the articles was the need to

address both pathologies in their summary, establishing or not a relationship between them, totaling 18 articles.

## RESULTS

There seems to be a convergence between the published literature so far, pointing to a greater propensity for pediatric patients infected with Sars-Cov-2 to develop KD. The number of patients with KD symptoms seen at a specific center increased from 2 to 17 in 11 days (MOREIRA, 2020). In a sample space of 21 patients diagnosed with KD, 91% had previous contact with SARS-CoV-2 (TOUBIANA, 2020) whereas other studies point to a 30-fold increase in the prevalence of KD since the beginning of 2020 (VERDONI, 2020).

## DISCUSSION

In 2004, prospective cohort studies had already established a relationship between KD and HCoV-NH, with the description that 4.5% of patients with this infection developed KD (I think this fits the results better). Therefore, it was suggested that infection with another Coronavirus strain could have a similar relationship.