## CASE REPORT OF KAWASAKI DISEASE AND SARS-COV-2 INFECTION IN A PAEDIATRIC HOSPITAL

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#### BACKGROUND

# Kawasaki disease (KD) is a systemic vasculitis of unknown etiology that affects children younger than 5 years old. The pandemic SARS-CoV-2 infection brought out cases reported to have association between sars-cov-2 infection and KD. Clinical analogies verified between the two conditions, open new perspectives with regard to etiopathogenesis.

#### AIM AND OBJECTIVES

In this report a severe hyperinflammation case of 9-year-old girl (27kg, 131 cm), previously healthy, is described in order to bring clinical data regarding the association SARS-CoV-2 infection and KD during epidemic-period.

#### MATERIALS AND METHODS

In collaboration with the clinician we reviewed the medical charts of KD SARS-COV-2 associated case, diagnosed between January-July 2020.

#### CASE REPORT

On April-16-2020, a 9 year old girl was admitted in emergency department for suspicion of acute abdomen, persistent fever associated. Nasopharyngeal swab test for SARS-COV-2 was negative for the second determination for her but positive for the mother.

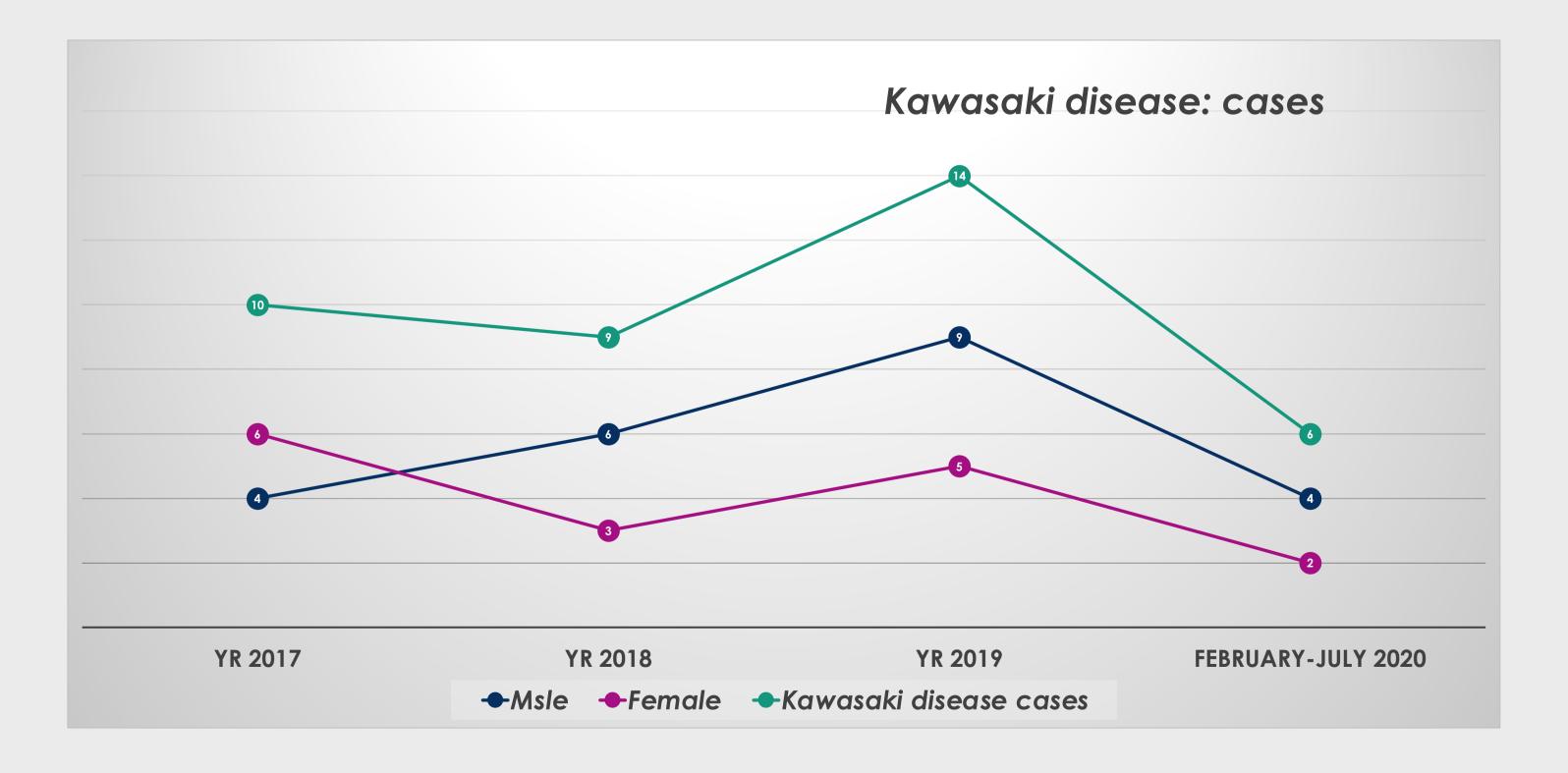
Abdominal ECO showed lymphadenomegaly due to hyperinflammation and CT scan reporter evidence of interstial, parenchymal thickening and pulmonary infiltration. Echocardiogram showed normal coronary arteries with minimal pericardial effusion. Broad-spectrum empirical antibiotics were started.

On April 10 (illness day 7) respiratory distress appeared, critical condition similar to a shock syndrome and multiorgan failure occurred. Respiratory support and ionotropic agents were started in intensive care unit.

Confirmed the diagnostic suspicion of atypical incomplete KD non coronary involvement, treatment was switched to intravenous immunoglobulin 2g/kg, acetylsalicylic acid 30mg/kg methylprednisolone infusion until day of resigne.

On illness day-10, laboratory bood tests showed progressive reduction in inflammation markers, rapid normalization of liver enzymes (lipase-1824, amylase-502, declining leukocytes-8.57, Hb-12, negative-CRP).

Because of the uncertainly about the couse it was measured antispecific IgG antibodies to SARS CoV-2, therefore serology testing for SARS-CoV-2 revealed IgG antibodies concentration. At day 12, she was discharged.



### CONCLUSIONS AND RELEVANCE

It is known that SARS-CoV-2 infection can activate uncontrolled inflammation. Cases are being informally reported among pediatricians, and recently patients with severe forms is seen in different countries, emphasizing the apparent rise in the number of children presenting with a multisystem inflammatory state requiring intensive care. The connection between viral infections and KD, the analogies between the two conditions, open new perspectives with regard to etiopathogenesis.



