## **SCIENTIFIC LETTER**



## A Pediatric COVID19 Case with Suspected Acute Abdomen, Hyperferritinemic Sepsis and Developing MIS-C and Pancreatitis

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To the Editor: Multisystem inflammatory syndrome in children (MIS-C), that develops in children due to COVID-19 is a rare but serious condition associated with COVID-19 reported in children [1].

A healthy 12-y-old female patient had been admitted with abdominal pain, vomiting and fever and hospitalized with a prediagnosis of acute appendicitis. Surgical intervention decision was abandoned in the patient whose diarrhea started. SARS CoV2 RT-PCR test was positive. Abdominal CT revealed multiple lymphadenopathies with an edematous appearance compatible with typhlitis in terminal ileum. Broad-spectrum antibiotics and antiviral therapies were administered. COVID-19associated MIS-C was considered in the patient. Because the patient's fever was above 38 °C and was resistant to antipyretics, there was no decrease in infectious parameters, his lymphopenia did not improve; albumin level did not increase despite albumin replacement, and respiratory and gastrointestinal symptoms continued. IVIG 2 g/kg was administered as a 12-h infusion. The patient's fever decreased dramatically after IVIG infectious parameters regressed. Pancreatitis developed on the 4th day. The patient was discharged on the 13th day.

In a pediatric series, all 8 cases presented with atypical appendicitis [2]. Radiological imaging revealed lymphadenopathy in the abdomen and terminal ileitis in all children. Three of them required inotropic support in PICU. Four patients suspected of MIS-C were given IVIG. In India, an 11-y-old patient presented with fever, abdominal pain and skin rash [3]. Radiological imaging revealed inflammation in the terminal ileum and cecum.

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SARS CoV2 RT-PCR test was positive, and clinical improvement was observed with IVIG treatment.

Elevated ferritin levels were associated with increased mortality in COVID-19 patients [4]. Management of hyperferritinemic sepsis can differ from sepsis without hyperferritinemia. In addition to the usual antimicrobial approach, one should consider administration of specific antivirals, antiparasitics, antibacterials, and antifungals; as well as non-specific neutralization with IVIG for infections without specific therapies in the hyperferritinemic patient [5].

Although it is not clear whether pancreatitis in our case was related to drugs or developed as a part of the gastrointestinal presentation of COVID-19. Our case is important in terms of drawing attention that COVID-19 may present with a picture that mimics acute appendicitis in children.

## **Compliance with Ethical Standards**

Conflict of Interest None.

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