



## Corona Virus Disease-19 Presented with Acute Pancreatitis

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*To the Editor:* A 13-y-old female follow-up case of infrequently relapsing nephrotic syndrome (NS) off steroid presented with fever, facial puffiness, vomiting, and pain in abdomen. Pain was in left upper quadrant, radiating to back, aggravated by breathing, lying down and relieved by sitting and leaning forward. On examination diffuse tenderness was present in epigastric and left upper quadrant without guarding and rigidity and pedal edema. Investigation revealed neutrophilic leucocytosis (TLC, 13130 cells/ $\mu$ L, P74%, L22%), hypoalbuminemia (1.7 g/dL), hypercholesterolemia (568 mg/dL), proteinuria, amylase (217 u/L), and lipase (365 u/L). Hypoechoic area in the body of pancreas was found in ultrasound and diffuse pancreatic enlargement with peripancreatic fluid suggestive of acute pancreatitis (AP) in CT scan of abdomen. Conservative management includes intravenous fluid, analgesic, antibiotics (ceftriaxone, metranidazole) and child was kept nil orally, and later oral sips were allowed. RT-PCR for SARS Corona Virus-2 (SARS CoV-2) was positive. On discharge values of amylase (60 u/L) and lipase (64 u/L) were normalized, SARS CoV-2 was negative and omanacortil was continued. Child is in follow-up and in remission.

Common etiologies of AP in children are biliary/ obstructive (10%–30%), medication (5%–25%), trauma (10%–20%) and viral infection (8%–10%) [1]. MRI/MRCP is preferred diagnostic tool to rule out anatomical variation, biliary and obstructive etiologies. However in present case inflammation of pancreas was confirmed by CT scan and clinical and

biochemical features rule out biliary or obstructive cause. Prior literature suggested that SARS CoV-2 infection in children commonly focused on respiratory symptoms, associated lymphopenia and deranged liver functions, whereas the GI symptoms are left unexplored [2–4]. We thought that direct infection of pancreas by virus or medication is responsible for developing AP in present case. However child was off steroid since 8 mo, likely possibility is viral infection i.e., SARS CoV-2, which is supported by another similar reported case [5].

Unexplored GI symptoms in SARS Cov-2 infection in children may be due to predominately respiratory symptoms based screening. We pick this case as our unit has mandatory RT-PCR screening criteria for admission in ward. Therefore, we suggest that natural history of SARS CoV-2 infection children is not fully established, so high index of suspicion would require exploring in symptoms and signs mimicking like other viral infections in children.

### Compliance with Ethical Standards

**Conflict of Interest** None.

### References

1. Pohl JF, Uc A. Paediatric pancreatitis. *Curr Opin Gastroenterol.* 2015;31:380–6.
2. Dhochak N, Singhal T, Kabra SK, Lodha R. Pathophysiology of COVID-19: why children fare better than adults? *Indian J Pediatr.* 2020;87(7):537–46.
3. Dong Y, Mo X, Hu Y, et al. Epidemiology of COVID-19 among children in China. *Pediatrics.* 2020;145(6):e20200702. <https://doi.org/10.1542/peds.2020-0702>.
4. Streng A, Hartmann K, Armann J, Berner R, Liese JG. COVID-19 bei hospitalisierten Kindern und Jugendlichen: Ein systematischer Review zu publizierten Fallserien (Stand 31.03.2020) und erste Daten aus Deutschland [COVID-19 in hospitalized children and

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- adolescents]. *Monatsschr Kinderheilkd.* 2020; 21:1–12. German. <https://doi.org/10.1007/s00112-020-00919-7>.
5. Alloway BC, Yaeger SK, Mazzaccaro RJ, Villalobos T, Hardy SG. Suspected case of COVID-19-associated pancreatitis in a child. *Radiol Case Rep.* 2020;15(8):1309–12. <https://doi.org/10.1016/j.radcr.2020.06.009>.

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