

# ACUTE PANCREATITIS AS A CONSEQUENCE OF COVID-19 INFECTION



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#### Introduction

Acute pancreatitis is a condition involving inflammation of the exocrine portion of pancreatic parenchyma. Although gallstones and alcoholism are the most common causes of acute pancreatitis, there have been a number of cases caused by infections. While the main manifestations of Covid-19 are respiratory, more and more systemic manifestations have come to light, including acute pancreatitis. While the exact mechanism of the relationship between the two conditions is unknown, one theory is that the virus attacks the angiotensin converting enzyme, which is heavily expressed on the pancreas.

## **Case Description**

A 69-year-old female presents to the hospital after 1 week of epigastric abdominal pain. Patient described the pain as achy and radiating to the back. Patient also complained of nausea, loss of appetite, and dark stool. The patient was found to have a lipase of 668 units/L (reference range 14-63 unit/L), well above three times the upper limit of normal. She underwent CT of the abdomen, which showed peripancreatic stranding consistent with pancreatitis. After further inquiries, the patient denied any alcohol use and had a cholecystectomy in the past, the patient did however endorse having a viral illness 1 week prior to admission. Patient was tested for Covid-19 and was positive via PCR. Patient's triglycerides were within normal limits and IgG testing for autoimmune pancreatitis was negative. It was then surmised that the patient's recent Covid-19 infection was most likely the cause of the patient's acute pancreatitis.

The patient received fluids and was placed N.P.O. with instructions to advance the diet as tolerated. Unfortunately, the patient suffered a prolonged hospital course due to an acute right lower extremity DVT involving the right common femoral vein and saphenofemoral junction requiring mechanical thrombectomy due to continuing symptoms after medical therapy. The patient tolerated the procedure well, had significant improvement in nausea and abdominal pain, and was able to be discharged home.

#### Discussion

The true incidence of pancreatitis caused by Covid cannot fully be discerned as it often manifests with gastrointestinal symptoms which can disguise pancreatitis, and due to the highly transmissible nature of Covid leaving advanced imaging techniques which could reveal the cause of the pancreatitis rarely done. Nevertheless, when encountered with a Covid-19 patient presenting with abdominal pain, acute pancreatitis should always remain high on the differential.

### Figures





#### References

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