Covid-19 presenting as Acute Pancreatitis: A rare Association

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Background

Covid-19 was identified as a cause of the cluster of pneumonia, in the province of Wuhan in China in 2019, and soon was declared a pandemic by WHO in February ,2020. Fever, cough, shortness of breath, and pneumonia are the characteristic presenting features. We present a unique case of a COVID-19 patient presenting with atypical features of acute pancreatitis and bilateral lower extremity DVT.

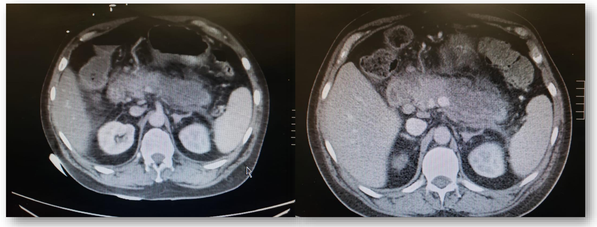

Figure 1:CT scan on day 1 showing pancreatic inflammation and edema of body and tail.

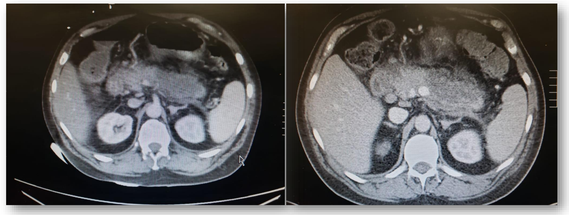

Figure 2:CT scan on day 6 showing persisting and increased inflammation.

Case Presentation

67 years old female with a past medical history of hypertension, uterine cancer, status post hysterectomy and CHF presented to the emergency department with cough, fever, nausea, vomiting, and diarrhea. Her chest CT scan revealed Bilateral ground-glass opacities and was found to be COVID positive. The patient later developed epigastric pain and tenderness. Further testing revealed amylase and lipase levels of 148 and 444 U/L respectively. CT abdomen showed peripancreatic stranding and inflammation around the tail of the pancreas with no evidence of necrosis or abscess formation. Normal, acalculous gallbladder and a normal biliary tree.

The patient denied any history of alcohol use or any history of gallstones. Experimental COVID-19 treatment including remdesivir, dexamethasone, and antibacterial for secondary infection was started and the patient was made NPO with bowel rest. The triglyceride levels were found to be 220mmol/L, ruling out hypertriglyceridemia. During hospitalization, she developed bilateral lower extremity swelling and pain despite continuous heparin prophylaxis. Doppler ultrasonography revealed bilateral non-occlusive thrombus in common femoral, deep femoral, superficial femoral, and popliteal veins. Occlusive thrombus revealed in the left mid to distal femoral vein. Heparin drip was started and was later transitioned to apixaban upon discharge.

Conclusion

Most common etiology of viral pancreatitis includes mumps, measles, Coxsackie, Epstein - Barr virus, and Hepatitis-A virus. According to our literature search this is the eleventh case of COVID-19 related pancreatitis. Understanding of COVID-19 is still evolving and gastrointestinal symptoms are among rare manifestations of this disease. We report this case to alert the physicians of this unique presentation. COVID-19 related pancreatitis should be kept in the differential diagnosis in COVID-19 patients with acute abdomen or epigastric symptoms. Furthermore, our case warrants the need for research on the pathophysiology of pancreatitis caused by COVID-19.

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