

Acute pancreatitis attributed to COVID-19; An unusual infectious etiology.

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Introduction

- COVID-19 infection can affect multiple organs.
- Constitutional and respiratory symptoms are the most prevalent presentation.
- Gastrointestinal (GI) symptoms constitute up to 25% of cases with diarrhea, nausea, and emesis as the usual complaints.
- From those with GI symptoms, less than 6.8% of cases present with abdominal pain and only 27% of those with abdominal pain experience acute pancreatitis.
- Here we present a case of severe AP with multiorgan involvement as the initial presentation of COVID19.

Clinical Case

- Case of a 19 y/o Female with a medical history of Obesity class I arrived at the ED with recurrent emesis and altered mental status.
- Symptoms began around four days prior with 6-7 episodes of non-bloody, non-bilious emesis, fatigue, subjective fever, and decreased oral intake, followed by acute onset of diffuse abdominal pain.

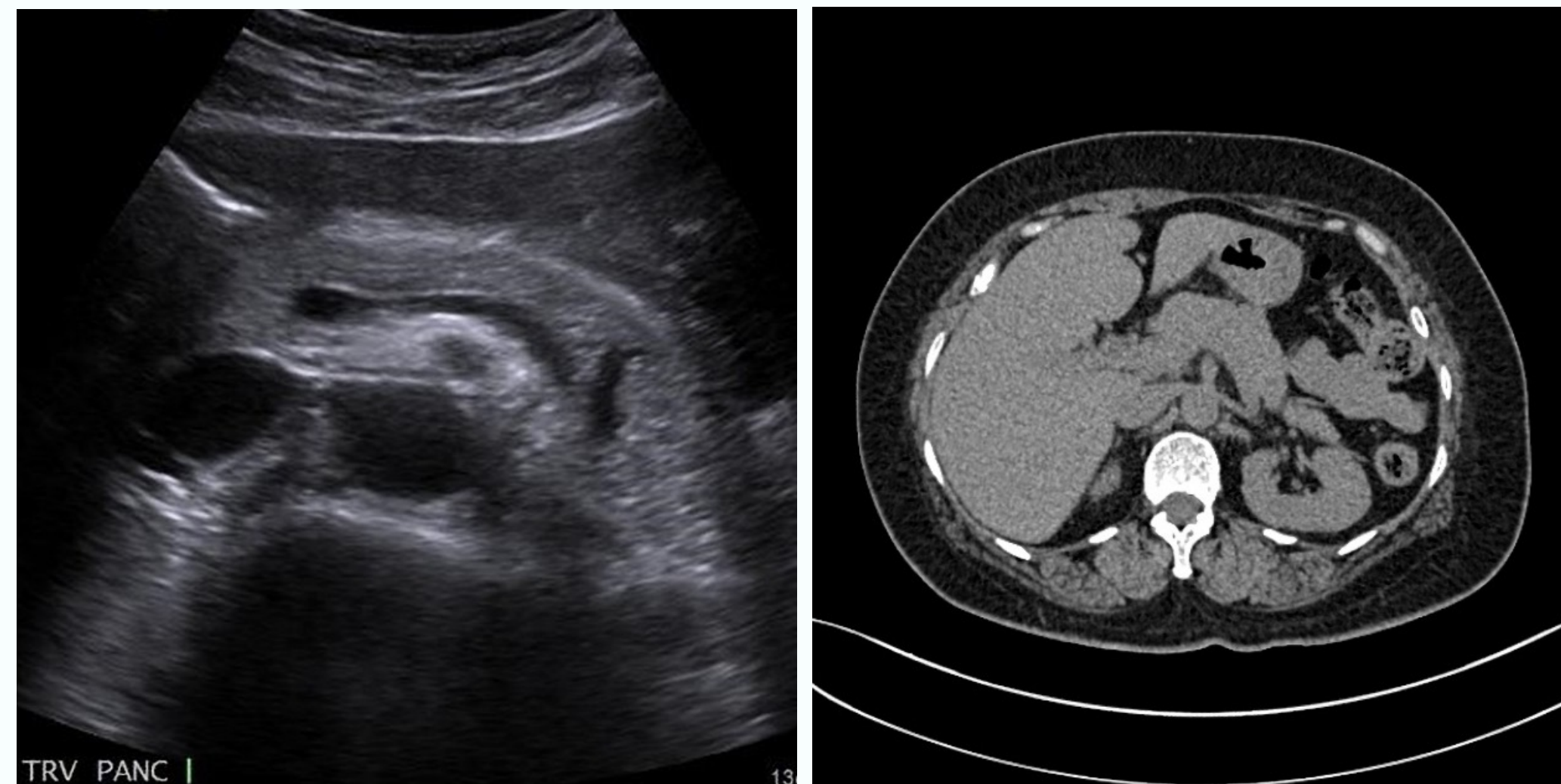
Physical Exam:

- **Vital signs:** 98/59mmHg, 114 bpm, 24 rpm, 37.2C
- **GA:** incoherent speech, impair alertness.
- **HEENT:** Dry oral mucosa.
- **CHEST:** decreased breath sounds at bases.
- **ABDOMEN:** Bowel sounds present, diffuse abdominal pain.
- **EXT:** No edema, cyanosis or clubbing.

Laboratories

Lipase	2483 U/L
Amylase	382 U/L
LDH	315 U/L
ALP	219 U/L
Sodium	155 mEq/L
Creatinine	1.33 mg/dL
Bicarbonate	<9 mmol/L
pH	7.0
pO2Sat	96%
HCT	51.8%
WBC	14.9 cells/L,
Glucose	774 mg/dL
COVID PCR	Positive

Images



- Abdominal US and CT with no findings suggestive of gallstones or intraabdominal pathology.

Clinical Case

- Aggressive intravenous fluid, insulin, broad-spectrum antibiotics, bicarbonate replacement, analgesia, and antiemetics were implemented.
- Hospitalization was complicated as the patient did not tolerate PO intake, and the high anion gap metabolic acidosis was difficult to close for several days.
- After almost two weeks in the ICU, the patient was discharged home without apparent pancreatitis or COVID-19 repercussions.

Discussion

- Our case did not have any risk factors for AP, and extensive investigations did not reveal a clear etiology.
- Viral, bacterial, fungal, and parasitic infections are less common causes of AP.
- There are limited data on COVID-19 and pancreatitis; however, recent studies suggest a higher mortality rate with a 20% increased chance of dying and worse clinical outcomes.
- The mechanism of pancreatic injury is not well understood, but there is a link between COVID-19 and the precipitation of autoimmune and systemic diseases.
- Our case is an example of severe pancreatic injury with multiorgan involvement in mild symptomatic COVID 19.

References

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