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EC GASTROENTEROLOGY AND DIGESTIVE SYSTEM

Case Study

Clinical Case of Covid 19 Disease Presented as Acute Cholecystitis/Pancreatitis. Surgeon's Point of View

Ammar Alkattan*

Consultant of General Surgery and Emergency Medicine at Damascus Hospital, Syria and Hepatobiliary and Liver Transplant Surgeon at Hamad Medical Corporation, Qatar

***Corresponding Author:** Ammar Alkattan, Consultant of General Surgery and Emergency Medicine at Damascus Hospital, Syria and Hepatobiliary and Liver Transplant Surgeon at Hamad Medical Corporation, Qatar.

Received: April 25, 2020; **Published:** July 30, 2020

Abstract

Introduction: In 2019, a new coronavirus was identified as the cause of a disease outbreak that originated in China. The virus is now known as the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Signs and symptoms of coronavirus disease 2019 (COVID-19) may appear two to 14 days after exposure. Common signs and symptoms can include:

- Fever
- Cough
- Shortness of breath or difficulty breathing [1].

A recent analysis of more than 200 people admitted to three hospitals in Hubei, China -- the province where the virus called SARS-CoV-2 originated -- with mild cases of COVID-19 found that almost 1 in 5 had at least one gastrointestinal symptom, such as diarrhea, vomiting, or belly pain. Nearly 80% also lacked an appetite.

Methods: Following a unique case presented in ER with digestive symptoms suggestive of acute cholecystitis without any respiratory or usual Covid 19 sings/symptoms. Patient was admitted as a case of biliary pancreatitis with picture of delayed presentation of acute cholecystitis for usual conservative treatment.

Results: The mentioned patient completely responded to conservative treatment of acute biliary pancreatitis and fully recovered on the day 3 of admission with no more abdominal complain and no new fresh issues. Patient have not developed any new other symptoms and didn't require any additional intervention, vital support nor ICU admission and discharged on day 4 to the isolation center for 14 days quarantine with further plan of elective cholecystectomy after 6 weeks.

Patient later completed his quarantine with No concerns and discharged with Covid 19 PCR tested as Negative.

A full report of the case is attached.

Conclusion: From surgeon's point of view, I believe that the abdominal pain should be a red flag of Covid 19 disease until proven otherwise.

Keywords: *Covid 19; Acute Cholecystitis; Pancreatitis*

Introduction

In 2019, a new coronavirus was identified as the cause of a disease outbreak that originated in China. The virus is now known as the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Signs and symptoms of coronavirus disease 2019 (COVID-19) may appear two to 14 days after exposure.

Case Study

Chief complaint

6 days history of abdominal pain.

History of present illness

47 years old morocco gentleman with no past medical nor surgical history presented in ED with 6 days history of abdominal pain on right upper quadrant area, constant, radiating to the right shoulder, worse after meals (especially heavy or fatty food), associated with nausea and vomit without fever.

This is first attack with no previous similar complain.

With more digging in his history the patient found to have abdominal discomfort -/+ bloating post some specific meals, mostly fatty.

Patient have had home medication for pain (paracetamol 1000 mg twice over last 24 hours before ED presentation) with no other treatment received.

He denied any respiratory symptoms (no cough, nor sneeze, nor runny nose, and nor breathing difficulties) over last 14 days.

Review of systems

- Constitutional: No fever, no chills.
- Respiratory: No shortness of breath, no cough, no wheezing.
- Cardiovascular: No chest pain, no palpitations.
- Gastrointestinal: No nausea, no vomiting, no diarrhea, no heartburn.
- Genitourinary: No dysuria, no urinary frequency, no urinary urgency.
- Musculoskeletal: No joint pain, no muscle pain.
- Neurologic: Alert and oriented X4.

Physical exam

On examination at time of presentation in ED the patient was in pain as described above with no distress, afebrile and vitally stable as following.

Parameter	Value w/Units
Temperature Oral	36.2°C
Heart Rate Monitored	80 bpm
Respiratory Rate	20 br/min
Systolic Blood Pressure	123 mmHg
Diastolic Blood Pressure	78 mmHg

Chest examination showed bilateral normal air entry with no abnormal sounds.

Abdomen examination showed soft, lax abdomen with moderate tenderness on RUQ with positive Murphy's sign with no guarding.

Assessment/plan

Patient initially is differentially diagnosed with gastroenteritis, acute pancreatitis, and acute cholecystitis on the top of the list and admission offered for further management.

CBC, CMP, Amylase, Lipase, CRP, INR/PT/PTT (and Covid19 PCR, following admission protocol) all requested.

Chest X-ray, ECG and abdominal ultrasound ordered.

The results of investigations came as following

XR chest showed (Figure 1)

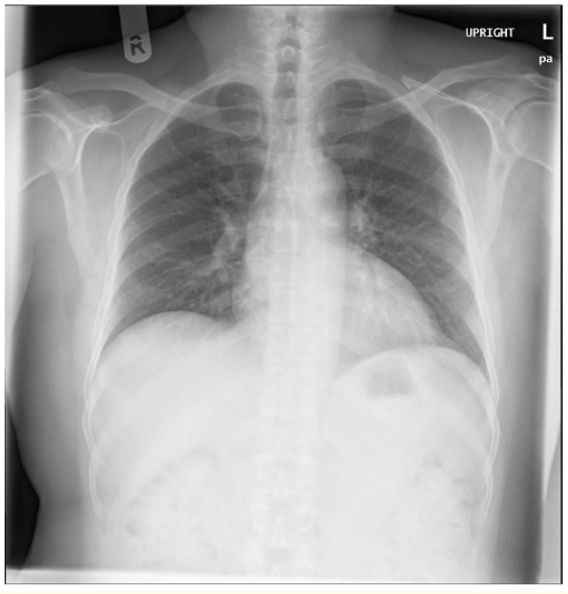

Figure 1: *XR Chest.*

Clear both lung fields and costophrenic angles.

Normal cardiac size and shape.

US abdomen (Figure 2)

Liver shows normal size with diffuse increase in echotexture suggestive of mild fatty infiltration. No focal parenchymal lesions noted. No I H B R D. Portal vein measures 9.9 mm, CBD measures 2.9 mm.

Gallbladder is contracted with multiple echogenic foci in the lumen with shadowing suggestive of calculi the largest measuring 12 mm. Wall thickness is 4.2 mm. No evidence of pericholecystic fluid.

Pancreas not well visualized due to interference from bowel gas.

Spleen normal in size and echotexture.

Both kidneys are normal in size and echotexture. No obvious calculi/hydronephrosis noted.

Conclusion:

1. Mild fatty infiltration of liver.
2. Gallbladder cholelithiasis. Wall thickness of 4.2 mm.

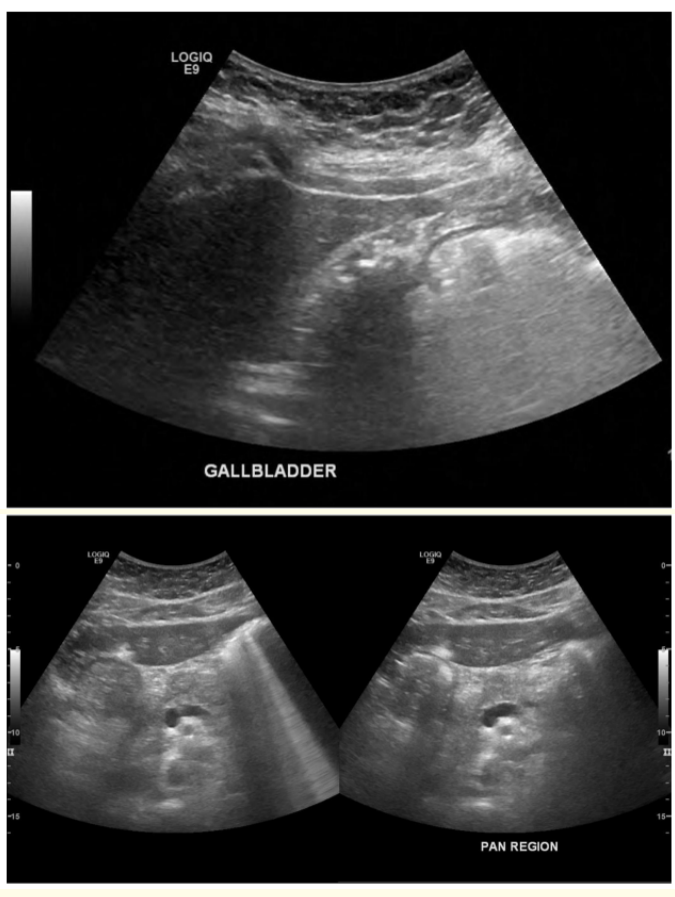

Figure 2: *US abdomen .*

Lab result came as following (Table 1)

Detail	Value w/Units	Normal Range
WBC	4.9 x 10^3/uL	4.0 - 10.0
RBC	4.9 x 10^6/uL	4.5 - 5.5
Hgb	14.2 gm/dL	13.0 - 17.0
Hct	42.4%	40.0 - 50.0
MCV	86.4 fL	83.0 - 101.0
MCH	28.9 pg	27.0 - 32.0
MCHC	33.5 gm/dL	31.5 - 34.5
RDW-CV	12.4%	11.6 - 14.5
Platelet	219 x 10^3/uL	150 - 400
MPV	9.7 fL	7.4 - 10.4
Absolute Neutrophil count Auto# (ANC)	2.2 x 10^3/uL	2.0 - 7.0

Lymphocyte Auto #	2.0 x 10^3/uL	1.0 - 3.0
Monocyte Auto #	0.5 x 10^3/uL	0.2 - 1.0
Eosinophil Auto #	0.2 x 10^3/uL	0.0 - 0.5
Basophil Auto #	0.02 x 10^3/uL	0.02 - 0.10
Neutrophil Auto %	43.9%	
Lymphocyte Auto %	41.0%	
Monocyte Auto %	11.0%	
Eosinophil Auto %	3.7%	
Basophil Auto %	0.4%	
Urea	2.9 mmol/L	2.8 - 8.1
Creatinine	62 umol/L	62 - 106
Sodium	137 mmol/L	136 - 145
Potassium	4.0 mmol/L	3.5 - 5.1
Chloride	105 mmol/L	98 - 107
Bicarbonate	25 mmol/L	22 - 29
Calcium	2.48 mmol/L	2.20 - 2.55
Calcium Corr	2.52 mmol/L	2.20 - 2.55
Bilirubin T	18 umol/L	0 - 21
Total Protein	72 gm/L	66 - 87
Albumin Lvl	38 gm/L	35 - 52
Alk Phos	122 U/L	40 - 129
ALT	52 U/L	0 - 41
AST	78 U/L	0 - 40
Troponin-T HS	5 ng/L	3 - 15
Amylase	76 U/L	13 - 53
Lipase	194 U/L	13 - 60
Glucose	6.0 mmol/L	3.3 - 5.5
CRP	6.0 mg/L	0.0 - 5.0
Covid19 PCR	Positive	Negative

ECG was normal as shown below (Figure 3)

Hospital course

Patient was admitted to the as a case of biliary pancreatitis with picture of delayed presentation of acute cholecystitis.

Patient completely responded to conservative treatment of acute biliary pancreatitis and fully recovered on the day 3 of admission with no more abdominal complain and no new fresh issues.

Patient have not developed any new other symptoms and didn't require any additional intervention, vital support nor ICU admission and discharged on day 4 to the isolation center for 14 days quarantine with further plan of elective cholecystectomy after 6 weeks.

Patient later completed his quarantine with No concerns and discharged with Covid 19 PCR tested as Negative.

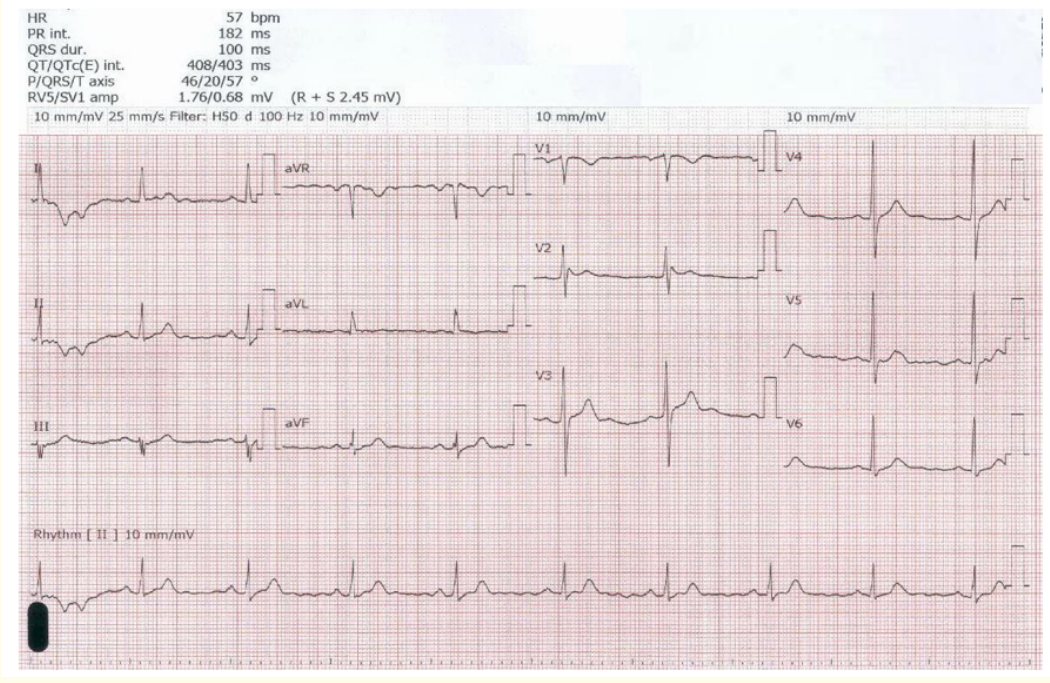

Figure 3

On discharge

Patient is asymptomatic and free of pain with normal vitals and lab wise as following.

Detail	Value w/Units	Normal Range
WBC	6.4 x 10^3/uL	4.0 - 10.0
RBC	5.0 x 10^6/uL	4.5 - 5.5
Hgb	14.4 gm/dL	13.0 - 17.0
Hct	43.2%	40.0 - 50.0
MCV	87.3 fL	83.0 - 101.0
MCH	29.1 pg	27.0 - 32.0
MCHC	33.3 gm/dL	31.5 - 34.5
RDW-CV	12.5%	11.6 - 14.5
Platelet	210 x 10^3/uL	150 - 400
MPV	9.9 fL	7.4 - 10.4
Absolute Neutrophil count Auto# (ANC)	2.6 x 10^3/uL	2.0 - 7.0
Lymphocyte Auto #	3.0 x 10^3/uL	1.0 - 3.0
Monocyte Auto #	0.6 x 10^3/uL	0.2 - 1.0
Eosinophil Auto #	0.3 x 10^3/uL	0.0 - 0.5
Basophil Auto #	0.01 x 10^3/uL	0.02 - 0.10
Neutrophil Auto %	39.6%	

Lymphocyte Auto %	46.6%	
Monocyte Auto %	9.6%	
Eosinophil Auto %	4.0%	
Basophil Auto %	0.2%	
Urea	4.6 mmol/L	2.8 - 8.1
Creatinine	63 umol/L	62 - 106
Sodium	140 mmol/L	136 - 145
Potassium	4.3 mmol/L	3.5 - 5.1
Chloride	106 mmol/L	98 - 107
Bicarbonate	23 mmol/L	22 - 29
Calcium	2.50 mmol/L	2.20 - 2.55
Calcium Corr	2.58 mmol/L	2.20 - 2.55
Bilirubin T	12 umol/L	0 - 21
Total Protein	68 gm/L	66 - 87
Albumin Lvl	36 gm/L	35 - 52
Alk Phos	85 U/L	40 - 129
ALT	37 U/L	0 - 41
AST	46 U/L	0 - 40
Amylase	55 U/L	13 - 53
Lipase	102 U/L	13 - 60
Glucose	5.6 mmol/L	3.3 - 5.5
CRP	2.4 mg/L	0.0 - 5.0
Covid19 PCR	Negative	Negative

Conclusion

From surgeon's point of view, I believe that the abdominal pain should be a red flag of Covid 19 disease until proven otherwise [2-6].

Bibliography

1. Coronavirus disease 2019 (COVID-19), Mayo Foundation for Medical Education and Research (MFMER).
2. Lei Pan., et al. "Clinical characteristics of COVID-19 patients with digestive symptoms in Hubei, China: a descriptive, cross-sectional, multicenter study". *American Journal of Gastroenterology* 115.5 (2020): 766-773.
3. Chaoqun Han., *et al*. "Digestive Symptoms in COVID-19 Patients with Mild Disease Severity: Clinical Presentation, Stool Viral RNA Testing, and Outcomes". *American Journal of Gastroenterology* (2020).
4. UpToDate. "Acute Diarrhea in Adults (Beyond the Basics)".
5. Cleveland Clinic. "Mom's Advice Is Still the Best for Treating Diarrhea".
6. CDC. "Coronavirus Disease 2019: What to Do if You Are Sick".

Volume 7 Issue 8 August 2020
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