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Bowel Obstruction Revealing a Mesenteric Infarct in a SARS COV 2 Infection Area: A Case Report

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Abstract **Case Report**

SARS COV 2 is an RNA virus with pulmonary tropism responsible not only for severe pneumopathy but which can cause major thromboembolic and cardiovascular complications with life-threatening consequences and are more serious with the presence of cardiovascular risk factors, cases of massive pulmonary embolism has been described in several articles as well as occlusion of the superior mesenteric artery.

Keywords: Revealing, Mesenteric Infarct Sars Cov2.

INTRODUCTION

Both arterial and venous thrombosis represents a major public health issue. The latter is greatly amplified by the COVID-19 pandemic. Beyond an infectious disease affecting mainly the respiratory tract, it is now clearly established that COVID-19 is a complex thrombotic disease. Our case report deals with acute bowel obstruction secondary to mesenteric ischemia in a patient with COVID-19.

CASE REPORT

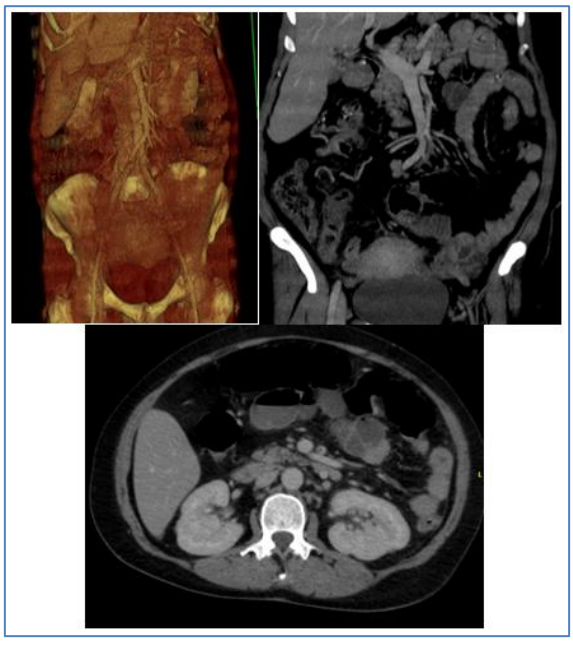
We report the case of a 58-year-old patient with balanced diabetes, on oral antidiabetics, admitted to intensive care for respiratory distress with COVID 19-type viral pneumonia confirmed by PCR.

After conditioning and stabilization of the vital constants, a biological assessment was carried out and objectified: An infectious syndrome with hyperleukocytosis at 13400 predominantly PNN, C-reactive protein (CRP) at 400, Prothrombin rate at 53 %, TCA a 33, LDH at 650, ferritinemia at 1991ng / ml, creatinine at 24mg / l, hyperglycemia, hepatic cytolysis, D-dimers at 2.7 ug / ml, fibrinogen level at 4 g / l, Thrombocytopenia at 83000 / ul, lipasemia at 203 U / l.

The patient was put on: azithromycin, hydroxychloroquine, vitamin therapy: vitamin C, Zinc, analgesic treatment: paracetamol and anticoagulant.

Admitted to intensive care with severe ARDS and on day 6 of hospitalization, the patient presented an intestinal obstruction consisting of diffuse abdominal pain with abdominal distension, cessation of materials and gas and fecal vomiting.

Rectal examination: empty rectal bulb. An abdominal angio-CT scan demonstrated distension of stomach and small bowel. The last ileal loops as well as the colonic frame were flat, with partial stenosis of the distal part of the superior mesenteric artery and complete occlusion of its ileocecal branch and ileal branches.



Partial stenosis of the distal part of the superior mesenteric artery, total occlusion of its ileocecal branch and its ileal branches.

Surgical exploration: a very abundant serohematic peritoneal effusion and extensive necrosis of the small intestine (1metr30) from ileocecal junction with several pre-perforation areas.

The surgical procedure having consisted of an embolectomy by Fogarty catheter, extensive resection of the necrotic small bowel and of the cecum with ileocolostomy, abundant washing and drainage by Redon drain then transferred to the intensive care unit. The patient died on postoperative day 6. resected small intestine showing extensive necrosis

DISCUSSION

Patients with the severe form of COVID 19 are at risk of developing micro-thromboses affecting almost all vascular beds. Mesenteric ischemia linked to COVID-19 is among the rare complications occurring during the course of coronavirus disease described in the literature, it is linked to the state of hypercoagulability caused by the virus which can be directly linked to its structure characterized by the presence of a surface protein which is the Spike protein which binds to the angiotensin 2 converting enzyme receptor (ACE2) located on the membranes of host cells such as lung, oral mucosa, liver, endothelium, and intestine which presents a high number of ACE2 receptor. Many phenomena are responsible of this coagulopathy : excess inflammation linked to the massive release of cytokines, platelet activation, vascular stasis and dysfunction endothelial. Pre-existing comorbidities also form the bed for thrombotic events. Abdominal manifestations, particularly gastrointestinal, have been frequently reported in patients with COVID-19.

CONCLUSION

Acute mesenteric ischemia is a complication during the viral infection type Covid 19; it can reveal a late complication of the disease occurring during hospitalization. Our case is added to the cases previously described in the literature, aimed at detecting and grouping the different systemic manifestations of this viral infection.

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