

Covid 19 infection leading to gastrointestinal bleeding and duodenal obstruction: a rare case

Shakshi Shah¹, Dr. Chirag Parikh²

¹ Final year medical student at Parul University of Medical Science and Research, Gujarat, India.

² Department of Surgery, Parul University of Medical Science and Research, Gujarat, India.

- **Introduction:** COVID-19 is a highly transmittable viral infection caused by SARS CoV-2. Our article is aimed at studying the complication of retroperitoneal bleed in a patient following low molecular weight heparin (lmwh) therapy during COVID-19 treatment.
- **Case report:** A 60 year old man presented with severe COVID-19 infection and was treated according to who guidelines with low molecular weight heparin (lmwh) therapy¹. On 10th day of treatment he complained of severe abdominal pain. On investigations (figure 1) we found haemorrhagic clots around 2nd part of duodenum and pancreas due to bleeding from gastroduodenal artery branch.
- **Discussion and conclusion:** Selective Trans arterial Embolization is considered as the first line treatment for Upper GI haemorrhage². In our case we did embolization for bleeding vessel. Complications of duodenal obstruction was managed conservatively before going for gastrointestinal diversion. In our case we did gastrojejunostomy as patient was not responding to conservative treatment³.
- We successfully operated by doing open gastrojejunostomy as laparoscopic was not possible for this patient due to old age and bad chest status due to covid 19 infection. On follow up for 6 weeks patient doing well without any major complaints.

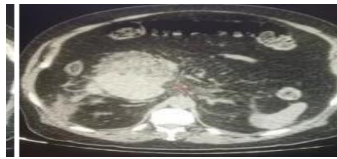


Figure 1

- So we stopped lmwh and managed him conservatively for 4 days. Then his haemoglobin dropped to 7 gm, so conventional angiography was done that showed active bleed; so coiling was done². He was discharged but after 2 days he complained of vomiting and dysphagia. On repeat CT (figure2) it showed severe duodenal compression so was operated for gastro-jejunostomy³ (figure3). Post op his D-dimer was high so lmwh dose was given but again he had a staple line Bleed⁴. It was managed conservatively with blood transfusion.

Figure 2: Repeat CT Scan

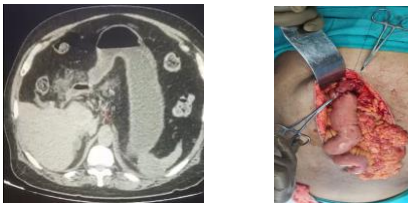


Fig 3: Gastrojejunostomy

References:

1. Who.int. 2021. Coronavirus disease (COVID-19) technical guidance: Patient management. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/patient-management>.
2. Gupta V, Irrinki S, Sakaray YR, Moond V, Yadav TD, Kochhar R, Khandelwal N, Wig JD. Treatment strategies for bleeding from gastroduodenal artery pseudoaneurysms complicating the course of chronic pancreatitis—A case series of 10 patients. *Indian Journal of Gastroenterology*. 2018 Sep;37(5):457-63.
3. Min SH, Son SY, Jung DH, Lee CM, Ahn SH, Park DJ, Kim HH. Laparoscopic gastrojejunostomy versus duodenal stenting in unresectable gastric cancer with gastric outlet obstruction. *Annals of surgical treatment and research*. 2017 Sep;93(3):130.
4. Acquafresca PA, Palermo M, Rogula T, Duza GE, Serra E. Early surgical complications after gastric by-pass: a literature review. *ABCD. Arquivos Brasileiros de Cirurgia Digestiva (São Paulo)*. 2015;28(1):74-80.