Reviewer's report

Title: Acute mesenteric ischaemia and duodenal ulcer perforation: A unique double pathology

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Reviewer: Werner Draaisma

Reviewer's report:

This is a case report conceding a relatively young patient with acute mesenterial ischemia and perforated ulcer of the duodenum that occurred simultaneously. Although it is a well written report I have several questions that need to be addressed before I can consider if this case report is of scientific interest.

I miss a, to my opinion, important diagnostic and therapeutic step in the work-up of this patient that is not mentioned in the discussion section as well. Patients that are likely to have bowel ischemia, like this patient with severe abdominal pain, multiple organ failure and metabolic lactate acidosis, should always be considered for angiogram prior to surgery. This allows for a rapid diagnosis of possible celiac trunk and/or SMA stenosis that can be stented at the same time. This might also allow for a less extensive resection during laparotomy due to restatement of arterial blood flow to the small bowel. Then, surgery should follow in order to resect bowel if needed. If the clinical situation of a patient does not allow for angiogram first, this should be executed after surgery. My question is therefore: have the authors considered angiogram? CT scan with arterial contrast has not a high sensitivity for celiac trunk/SMA stenosis.

Another possible explanation for the peptic ulcer can be that a severe stenosis at the celiac trunk is present. As most vascularisation of the duodenum is derived from vessels directly coming from this trunk, this should be kept in mind.

Was the celiac trunk and SMS examined during laparotomy? I think that this is the most likely cause of the peptic ulcer, rather than a stress ulcer as proposed.

A few other questions:
- what time frame existed between presentation and diagnostic laparoscopy? According to my interpretation of the clinical condition of this patient at presentation, rapid surgical intervention was indicated rather than admittance to n ICU first.
- what is the indication for a "ascites tap"? What did the authors expect? What does the biochemical result of this test implicate? Is this test a standard approach to their opinion for patients with an acute abdomen with free abdominal fluid?
- why was the peptic perforation clipped after 2 weeks during endoscopy that was performed for a different indication??

Level of interest: An article of limited interest
Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.