

Format for ANSWERING REVIEWERS



December 28, 2013

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 7323-review.doc).

Title: Surgical management of peritonitis secondary to acute superior mesenteric artery occlusion

Author: Stefan Acosta

Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 7323

The manuscript has been improved according to the suggestions of reviewers:

1 Revision has been made according to the suggestions of the reviewer

Rev 1

This is a very interesting work on this field; it is surely updated and fascinating! Surely to be published!

Rev 2

The topic is of interest. Comments of this reviewer are: 1. The title refers to peritonitis due to SMA occlusion and the running title to ischemia.

The running title is changed to "Superior mesenteric artery occlusion with peritonitis"

The context refers to SMA occlusion with minimal information on peritonitis.

The section "Evaluation of the extent and severity of mesenteric ischemia" was lengthened:

"The SMA supplies the whole small bowel and the right colon to the mid transverse colon, and the ischemic lesions at laparotomy are usually extensive. Of note, the ischemic lesions occur first in the mucosa and may be extensive, and in few cases, no signs of ischemia may be visible on the serosa side at early laparotomy. Without treatment, development of a variable length of full bowel wall gangrene will occur."

2. Medical treatment: When to start? Immediately postoperatively?

Yes, I revised, added and clarified by adding in the section "Medical treatment after acute SMA occlusion":

During the critical postoperative period all patients, undergoing revascularization of the SMA and/or just bowel resection, are immediately treated with low molecular weight heparin, and full dose to those with embolic occlusion. Patients surviving acute mesenteric vessel occlusion need to be carefully medicated when discharged.

To emphasize the importance of medical treatment I added: "Most importantly, most patients with embolic SMA occlusion have synchronous embolism to other vascular territories⁴ and needs to be protected from new embolic events."

Rev 3

1 This article reviews surgical management of peritonitis secondary to acute superior mesenteric artery occlusion. The topic is of interest, but the writing skill is not good enough. The following questions are provided for its polishing.

2 The title is focused on "peritonitis". However, in the context very few words are about inflammation of the peritoneum. The authors are suggested that either they revise the title or reinforce the contents with more

information of peritonitis.

This fact was also mentioned by rev 2 and I added in the section "Evaluation of the extent and severity of mesenteric ischemia": "The SMA supplies the whole small bowel and the right colon to the mid transverse colon, and the ischemic lesions at laparotomy are usually extensive. Of note, the ischemic lesions occur first in the mucosa and may be extensive, and in few cases, no signs of ischemia may be visible on the serosa side at early laparotomy. Without treatment, development of a variable length of full bowel wall gangrene will occur."

3 The running title uses "ischemia" which is quite different from "occlusion" in the full title.

This discrepancy was mentioned by rev 2 as well. The running title is changed to "Superior mesenteric artery occlusion with peritonitis".

4 The article states a number of radiological terms of which some are incorrectly used. Revision and proof-reading by diagnostic and interventional radiologists are suggested.

I do not quit agree.

5 Clinical manifestation of SMA embolism needs elaborating, especially the location of embolus. Difference in manifestation and management exists between the stem and branch embolism.

In the section "Open SMA embolectomy" I therefore revised/commenced:

"Most patients with embolic SMA occlusion will have a main stem embolus and an extensive intestinal ischemia⁴."

and finished with: "The minority of patients with a peripheral embolic SMA occlusion⁴ in one or multiple branches and a limited bowel segment of ischemia may primarily be treated with a short bowel resection and primary bowel anastomosis without attempting intestinal revascularization."

By adding this information, I also added in "Hybrid or endovascular therapeutic options in acute thrombotic occlusions"

"Most patients with acute thrombotic SMA occlusion due to thrombosis superimposed on an underlying local occlusive atherosclerotic lesion in the proximal SMA, have an extensive intestinal ischemia, which requires revascularization for longer survival⁴. "

6 What is the significance of stenting if there is no stricture?

Stenting is performed in atherosclerotic occlusive lesions (either high-grade stenosis or occlusions). The pathogenesis was now explained and clarified (see answer to item 5)

Complications of stenting should be presented, including re-occlusion.

I added at the end in "Antegrade recanalisation and stenting of the SMA".

"One of the most feared complications after antegrade recanalisation is a long dissection of the SMA without being able to create a re-entry with the guide wire into the true lumen of the distal SMA. The end-result may be a worsened ischemia of the intestines, leading to no other option than to perform an extensive bowel resection and to leave the patient with short bowel syndrome²¹."

I clarified in "Radiological follow up after stenting of the SMA":

"The small group of patients experiencing acute thrombotic stent occlusion at follow-up was reported to have a mortality rate of 50%¹⁶."

7 The section of "Hybrid or endovascular therapeutic options" is poorly informative. "Hybrid" emphasizes the COMBINATION of open surgery and percutaneous procedures under the guidance of the angiograph. The installation of the device will be redundant in the operation room if just for "elderly fragile patients". Such subjects can be referred to the professional angio-room.

Patients with peritonitis need to be transferred to a hybrid room for both laparotomy and the possibility for hybrid/endovascular treatment.

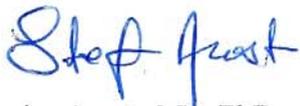
This is emphasized in the Introduction "The patient needs to be transported to a vascular center with available hybrid operation room facilities with a high quality, fixed angiographic system, or mobile C arm, where laparotomy and open and endovascular therapy are possible."

Hence, the hybrid room is, besides a fully equipped operation room, also a professional angio-room in vascular centers.

2 References were corrected with PMID and DOI.

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*.

Sincerely yours,

A handwritten signature in blue ink that reads "Stefan Acosta". The signature is written in a cursive, flowing style.

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