

Peer Review File

Article information: <http://dx.doi.org/10.21037/dmr-20-51>

Reviewer A

Comment 1: The introduction of the background can use more updated data.

Reply 1: Included updated text and reference regarding technological advances in endovascular treatment of lower gastrointestinal bleeding.

Changes in text: Technological advances in interventional radiology has allowed endovascular treatment of lower gastrointestinal tract bleeding to be safer and more precise.

Comment 2: Figure1 cannot meet the needs of journal publication which need to be re-drawn, what's more, figure legend also needs to be added below.

Reply 2: Have changed the figure into a table

Changes in text:

Table 1: Lactate levels after angioembolization

	Time after angioembolization (hrs)		
	12	24	36
Lactate levels (mmol/L)			
Case 1	1.1	0.8	1.7
Case 2	2.1	1.3	2
Case 3		1.2	

Comment 3: It's better to sort out and give the imaging results of the three cases discussed in the article.

Reply 3: Have added imaging results.

Changes in text: as below

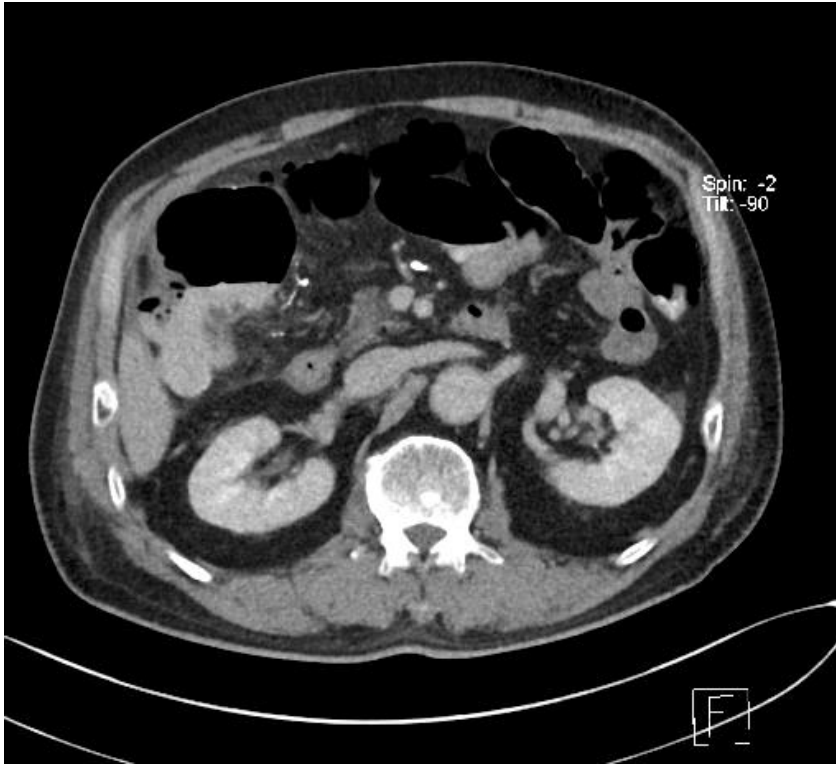


Figure 1: Gas along the wall at the hepatic flexure is suspicious for pneumatosis coli

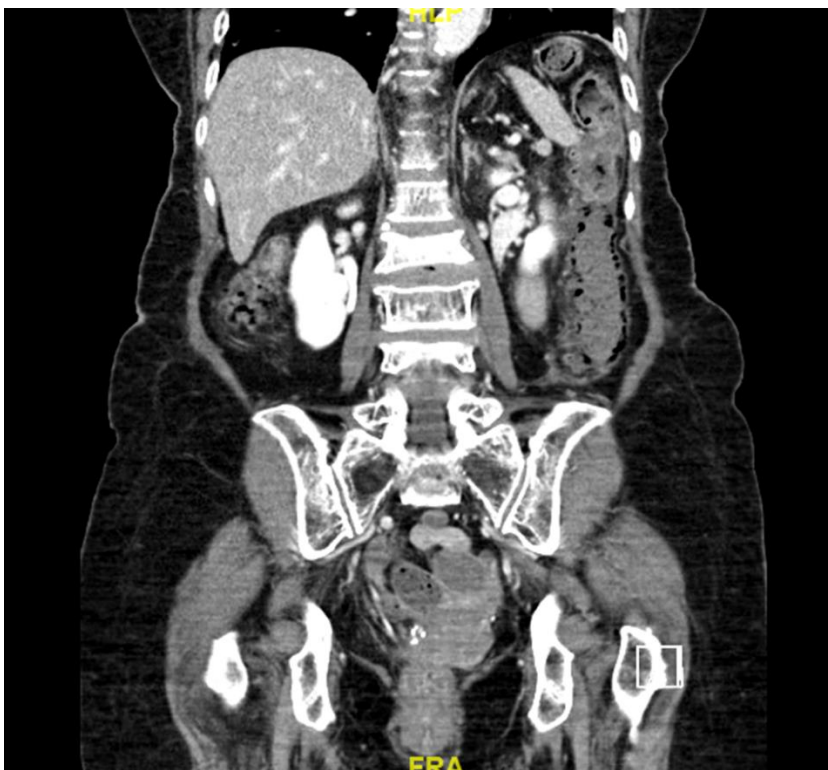


Figure 2: Entire segment of the descending colon up to the splenic flexure appears non-enhancing with intramural gas pockets

Comment 4: In the discussion part, the author should give a more detailed theoretical basis and ideas for the views/topic discussed in the article, for example, the reason and re-thinking of the reason that serum lactate couldn't act as a significant marker for bowel ischemia which was considered positive due to the potential biochemical principles before.

Reply 3: Added more details for the reasons why lactate is not able to act as a significant marker for bowel ischemia

Changes in text: It used to be thought that, as a result of ischemia and hypoperfusion, intestinal cells undergo anaerobic respiration and release lactate into the circulation.

Raised serum lactate as a marker of bowel ischemia had been supported by studies performed in the past. However, it has been increasingly recognised that serum lactate is not adequate as a marker for bowel ischemia.⁸ It is likely that, for serum lactate in the circulation to be raised, the amount of lactate released into the circulation needs to exceed the capacity for it to be metabolised. Also, if there is sudden total arterial circulatory obstruction as in the cases of selective angio-embolization, there is lack of lactate clearance from the corresponding segments of ischemic gut back into portal circulation.

Reviewer B

Comment 1: A table presenting some basic information of these 3 patients is suggested.

Reply 1: Have added a table for basic information of the 3 patients

Changes in text:

Table 2: Clinical characteristics of the 3 patients

	Case 1	Case 2	Case 3
Demographics	64-year-old man	84-year-old woman	37-year-old man
Presentation	Abdominal pain and per-rectal bleeding	Melena and lower abdomen discomfort	Fresh per-rectal bleeding
Initial CT mesenteric angiogram findings	Hepatic flexure diverticular bleeding, acute bleed right colic artery	Proximal descending colon bleeding Background diverticular disease	Progressive hyperdensity within hepatic flexure of colon with intraluminal distension suggesting

			late arterial or venous bleeding Background pan-diverticulosis
Angioembolization	Right colic artery	Proximal branch of inferior mesenteric artery	Hepatic flexure artery
Emergency laparotomy findings	Gangrenous changes at hepatic flexure	Ischemia from splenic flexure to the rectosigmoid junction	Ischemic segment at the hepatic flexure

Comment 2: The images of CT could improve the readability.

Reply 2: Have added imaging results.

Changes in text: as per Reviewer A Comment 3

Comment 3: A table reviewing previous relevant literature is suggested.

Reply 3: Although there is literature on bowel ischemia, we were not able to find much relevant literature on lactate levels for bowel ischemia specifically after angio-embolization.

Changes in text: Nil