Peer Review File

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Reviewer A

Nice case and a good outcome. Surely there should be some review of known literature regarding APC and the management of malignant tumour bleeding in order to put this case in context? I do not understand the last sentence or what it brings to the report. Photos would seem to be needed but that is an editorial matter? In addition, some description of the settings used, extent of APC and technique etc. I think a bit more work and then re-submit. The message is a useful one.

Comment to Reviewer A statement: Thank you for the wonderful input and your kind review on the need to highlight what the pandemic has done to our healthcare, worldwide. Your comments are useful for us to improve further on this particular note.

Reply to Reviewer A: During our literature review, we came to understand that indeed there has been reviews on APC alongside other endoscopic therapies though the rarity of these cases requiring endoscopic therapy means that a large study could not be conducted. We also found that most cases which bleed can be treated conservatively and then directed for definitive oncological/surgical therapy. In the cases that do require some form of endoscopic therapy prior to the era of hemostatic powders, various authors arrive to the similar conclusion that APC can offer temporizing measure to control bleeding due to its rapid coagulation properties. As references are limited, we could only describe the few pertinent ones (see references 13, 14 and 15).

I do agree with you that the incorporation of a management review in malignant tumour bleeding is useful and though there are no fixed algorithm which exists for endoscopic management in view of tumour heterogeneity, we found that there are indeed review articles that offers useful insights into addressing these measures. We will amend this accordingly and change one of the references to make the whole agenda of this article noteworthy.

As for the last sentence and how it fits to the whole report, we aim to first describe that endoscopic therapy in bleeding malignant tumours are not something that is utilized frequently in our routine endoscopy practices. Most patients who develop

significant bleeding because of GI tumours are few and far in between. These patients are managed with optimization and stabilization while ongoing investigations are being performed. They are then subjected to definitive oncological therapy to control the bleeding or operative intervention to address both the tumour and its bleeding related complications. Given the fact that there was a delay in our case due to COVID-19 infection and the absence of hemostatic powder which has been proven useful in non-colonic bleeding tumor endoscopic management, we had to resort to older endoscopic therapy, namely APC.

Our aim of this case is to both highlight that in a resource constrained world due to the pandemic where all healthcare focus is shifted to managing COVID19, all is not lost and that we could still resort to equally safer alternatives. We also wish to point out that the pandemic has exploited our weaknesses which was not immediately apparent pre-pandemic in addition to putting a significant burden on our GI staff. We do however see your point that it does not fit the article concept and will thus remove the last paragraph and reword to make it more relevant on how the pandemic has affected non-COVID19 related illnesses.

For photos on APC probe being directed to the bleeding tumour, we do have three images attached to this manuscript portraying the 'firing' in a sequence of before, during and after the result of APC being utilized.

Changes in text:

We have modified the text in Abstract and removed this sentence
"Lesser mentioned but equally important matters are procedural-related issues such as operator ergonomics, equipment limitations and communication problems encountered which could negatively affect patient outcomes while at the same time cause both physical and mental strain on the endoscopy team."
We changed this to the following to make it more comprehensive and relevant to our case "The COVID-19 pandemic has brought about various disruptions in our routine endoscopic practices. Aside from delays in timely diagnosis and definitive intervention, endoscopic practices alongside performance are equally affected by resource limitation which is highlighted in our case." (see Page 3, line 1-4)

For description of the settings used, extent of APC and technique etc., We have modified our text as advised and added the text "Effect 2, 20-30 Watts, 2.0 L/min", 20-40 Watts, 2.0 L/min, modes on the ERBE VIO 200 D electrosurgical unit AND
The probe was placed 5-6 mm away from the tumour tissue and controlled firing

performed on the bleeding site until coagulation occurred. This was carried out in a systematic proximal to distal, clockwise fashion to allow for better visualization of subsequent bleeding targets. (See Page 9, line 16-22)

We have removed this from the Conclusion in order to put the case into a better context

"There has yet to be a proven endoscopic modality shown to be the go-to option though there are early promising data coming from HemoSpray. Larger scale studies focusing on endoscopic management of malignant LGIB are needed to meet the expectations of reducing rebleeding rates and improving patient outcomes. Unfortunately, the obstacles of recruiting sufficient cases to ensure a well-powered study is that it remains an extremely uncommon presentation compounded by tumour heterogeneity. Until a concrete algorithm exists, we would need to rely on the present endotherapeutic armamentarium when precious timing is needed before definitive surgical management. At this juncture, having a sound therapeutic strategy alongside multidisciplinary involvement would be the best step forward." (originally in Page 12)

And modified our text as advised to the following:-

Malignant LGIB cases profound enough to necessitate hemostatic intervention are a minority, and our case scenario examines the unprecedented issue that occurred during the COVID-19 pandemic where endoscopic intervention poses a challenge. This would have been somewhat different if hemostatic powders had been readily available given the overall promising prospects for lower rebleeding rates and ease of use. Despite this shortcoming, we were able to circumvent the problem with endoscopic APC to temporarily control the bleeding colonic tumour while awaiting definitive intervention. We need to be aware that despite APC's temporizing hemostatic benefits, there remains the risk of significant rebleeding which could be addressed with repeat endoscopic procedure (13, 20). However, the COVID-19 pandemic has presented us with unique limitations to endoscopic practice as described earlier, some of which may affect endoscopic performance and impact overall patient outcomes. These issues need to be highlighted and outrightly addressed as they could be effectively mitigated through prior strategic planning, robust teamwork collaboration and multidisciplinary management.

(see Page 12, line 6-20)

We have also removed the following – "It certainly does not help with the ongoing COVID-19 pandemic which continues to overwhelm and exploit healthcare resources. Despite multiple societal recommendations on transforming endoscopic practices to befit COVID-19 safety precautions, less is mentioned at a more personal level

involving the endoscopists and their assistants. Overlooking these issues would inherently lead to suboptimal care and subpar procedural performance." (originally in Page 12)

For review of APC and management of malignant tumour bleeding we have added a new reference as per Reviewer A's recommendation (see Page 15, line 22-23). The previous reference 16 was removed and necessary re-numbering alterations has been made to the other affected references. (see Page 10, line 4,6,9,15)

Reviewer B

Thanks for the intriguing case sharing. The right to seek medical treatment of some disorders were deprived, under the rigorous pandemic. It is very important to use novel technology to buy more time when encountering urgent cancer bleeding.
This patient complained of hematochezia for one month and change bowel habits for the past three months. Index colonoscopy performed no intervention, but biopsy. Could the hemorrhage be caused by the procedure of biopsy, because multiple would be created? Would it be better to get tissue proof, after COVID-19 pneumonia is resolved? If the medical institutions are lack of equipment, conservative strategy is more recommended.

Comment to Reviewer B statement: Thank you so much for the comments. It is true that biopsies may cause immediate bleeding but a targeted approach limits samples from being taken and thus reduces this risk. Also, the complication of major bleeding in this instance would be low as there were no added risk of coagulopathy or thrombocytopenia (reflected in the lab investigations provided – see Page 5, line 24-25 and Page 6, line 1-5). This allowed us to go ahead and perform the biopsies. Moreover, major bleeding resulting from biopsies though uncommon, should occur within the first 24-48 hours.

Reply to Reviewer B: Our patient however developed bleeding 10 days after the first colonoscopy and we would be inclined to consider the bleeding to be due to the colon cancer rather than the biopsy area. We agree that conservative management is the right way forward however the risk of colonic tumor obstruction was a concern to our surgical colleagues, and it was a matter of timing before he would present with intestinal obstruction and thus necessitating an emergency Hartmann's procedure. Thus, our efforts were focused on getting him better from COVID-19 infection and arrange for timely surgical intervention.

Changes to text:

Pertaining to tissue proof, we have modified our text and added the words “The final overall diagnosis was pT3N0M0 moderately differentiated colonic adenocarcinoma” (see Page 2, line 22-23). This diagnosis was also mentioned in Page 12 (line 1-2) under Discussion.

We have also modified our text as advised and added the word ‘targeted’ in front of the word ‘biopsies’ to signify the method of our biopsy sampling as compared to random to allow for an ideal distinction that efforts were made to reduce the chances for post-biopsy bleeding. (see Page 6, line 17).