

Reviewer #1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade A (Priority publishing)

Conclusion: Minor revision

Specific Comments to Authors:

Firstly, I would like to congratulate you by trying to add more information on this issue. I consider that your study needs to be slightly improved in some of its parts.

I proceed to perform some commentaries for each manuscript section: In the ABSTRACT and CORE TIP:

- Some minor changes are suggested in attached MS-Word document modified with Control Panel.

Answer: Thank you for your helpful suggestion. I agree with your pointers and have revised the manuscript in accordance with your recommendation.

In the INTRODUCTION:

- Authors only mention the potential effect of magnetic force on the anastomoses. But it seems to be logical than maybe the magnetic force needed could be also related to issues like tissue thickness, oedema, inflammation,

Answer: Thank you for the insightful comment. I totally agree with your comment and have accordingly added the relevant content to the revised manuscript ("Introduction" Paragraph 2).

- Line 109: authors speak about "credibility"; I believe that this word is maybe too strong, those papers are published and peer reviewed, so its credibility must not be questioned... I suggest to write some like "limit the results or obtained conclusions" or similar.

Answer: Thank you for your valuable suggestion. I have accordingly revised the text in question. ("Introduction" Paragraph 2)

In the MATERIAL AND METHODS section, we can mention:

- What does NdFeB means?

Answer: In the revised manuscript, we have expanded the abbreviation NdFeB, as suggested. ("Magnets")

• Surgical procedure: I don't understand well the concept "mesangial edge"; Maybe is better to write mesenteric or anti-mesenteric? Were they situated in a colon teniae?

Answer: I agree with your amendment and have accordingly revised the text in question. ("Surgical procedure")

• Which one is postoperative analgesics regimen? How were rats euthanized?

Answer: Thank you for your questions. I have supplemented the revised manuscript with the required details for clarity ("Postoperative care" and "Tissue harvest and burst pressure").

• Is it possible to add more figures explaining deeply anastomotic diameter testing?

Answer: I believe that the measurement of the anastomotic diameter is adequately depicted in Figures 4D and 5D. However, if there are any aspects of this testing that needs to be elaborated, please let me know.

• Concerning histological analyses... Please add information about what parameters were evaluated about anastomotic healing (as examples: collagen amount? Inflammation? Muscle area? Etc...). Were colon layers restituted ad integrum in the anastomotic area?

Answer: Thank you for your valuable suggestion. There were no obvious differences between the two groups of anastomoses based on visual and histological observations. Therefore, the collagen content and inflammatory markers were not further measured. Based on observations by light microscopy, all layers of colon anastomosis in both the groups had healed well. I respect your suggestions, but I would not be able to provide these data in the present article as I think these are out of scope for the present work. However, in my future work, I will adopt your suggestions and measure the collagen and inflammatory response indicators of the anastomosis.

• Other minor changes are suggested in attached MS-Word document modified with Control Panel.

Answer: Thank you very much for your thorough review.

RESULTS SECTION:

• HISTOLOGY (see previous commentary in M&M): Is it possible to add information related to the situation of the rest of the layers? Submucosa (the most important in anastomosis healing), muscular, etc.

Answer: Thank you for your valuable advice. There were no obvious differences between the two groups of anastomoses based on visual and histological observations. Therefore, the collagen content and inflammatory markers were not further assessed. According to the light microscopy observation, all layers of colon anastomosis in both the groups had healed well I respect your suggestions, but I would not be able to provide these data in the present article as I think these are out of scope for the present work. However, in my future work, I will adopt your suggestions and measure the collagen and inflammatory response indicators of the anastomosis.

- Other minor changes are suggested in attached MS-Word document modified with Control Panel.

Answer: Thank you very much for your thorough review.

DISCUSSION SECTION:

- I suggest to add to the references and comment these review article in the field or similar: o Diaz R, Davalos G, Welsh LK, Portenier D, Guerron AD. Use of magnets in gastrointestinal surgery. Surg Endosc. 2019 Jun;33(6):1721-1730. doi: 10.1007/s00464-019-06718-w. Epub 2019 Feb 25. PMID: 30805789.

- o Trujillo Loli Y, Trejo Huamán MD, Campos Medina S, Vega Landa JI, García Pérez R, Targarona Soler EM. Physical Bases, Indications, and Results of the Use of Magnets in Digestive Surgery: A Narrative Review. J Laparoendosc Adv Surg Tech A. 2022 May;32(5):485-494. doi: 10.1089/lap.2021.0314. Epub 2021 Sep 6. PMID: 34492199.

Answer: Thank you for the recommendations. I have added these two articles to the present references. (Reference 16-17)

- Line 246: I suggest better that “convincing” to use a word like “enough” or “sufficient”,...

Answer: I agree with you and have made the modification in accordance (“Discussion” Paragraph 1).

- Please add more information or explain the study limitations.

Answer: Thank you for the suggestion. I have done the needful in the revised manuscript. (“Discussion” Paragraph 4)

- Other minor changes are suggested in attached MS-Word document modified with Control Panel.

Answer: Thank you very much for your helpful review.

REFERENCES SECTION:

- I believe that 16 references are very few for an original research; please consider to add more about magnetic anastomoses or about anastomosis healing. Newly I would like to congratulate authors for their work. Keep working in this way and trying to publish your research.

Answer: According to your suggestions, we have increased the number of references to 25.

Thank you once again for your kind appreciation.