

We thank you reviewers for their careful evaluation of our manuscript. We have addressed their comments (below) and made corresponding changes in our revised manuscript.

Reviewer #1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade A (Priority publishing)

Conclusion: Minor revision

Specific Comments to Authors:

This paper reports the prospective clinical results of Reinforced tissue matrix (RTM) in the treatment of parastomal hernia and post-ileostomy incisional hernia. No such literature has been found so far, so the article is advanced. This study reported 28 cases, including 21 cases of parastomal hernia, 4 cases of incisional hernia, and 3 cases of parastomal hernia/incisional hernia. Laparoscopic surgery was performed in 15 cases, robotic surgery in 10, and open surgery in 3. RTM were used in sublay for 23 cases, IPOM for 3 cases and intraperitoneal for 2. Follow-up was conducted after 1 month and 1 year, there was no hernia recurrence, and good results were obtained. In this paper, laparoscopic, robot and classic surgical methods were used to treat parastomal hernia or incisional hernia after ileostomy reversal. However, the surgical methods described here were to close the colostomy and then perform a colon anastomosis, which means that these colostomies are temporarily for prevention, rather than permanent colostomy. But this was not described in the patient data.

Author response: The reviewer is correct: all ostomies were temporary and not permanent. We have modified the text to indicate that osteomies were temporary ileostomies or colostomies for fecal diversion for a variety of reasons (e.g., radiation after rectal cancer, trauma, etc.). We are no longer use the term "parastomal hernia" to describe the patients in this study since they didn't have active hernias at stoma sites; instead, reinforcement of the abdominal wall was performed at the time of ostomy removal.

In the case of a permanent colostomy, the repair of the parastomal hernia requires the methods of Keyhole, Sugarbaker, etc. Therefore, the revision of this article may also require the involvement of the surgeon.

Author response: See previous response; all ostomies were temporary (not permanent).

Many of papers of using meshes for treatment and prevention of parastomal hernia and incisional hernia have been reported. But the application of reinforced tissue matrix (RTM) in the repair of parastomal hernia and incisional hernia after ileostomy has not been reported. However, this article refers to TELA Bio OviTex products, OviTex has 1S, 2S, LPR, PRS and other specifications. Although 1S and LPR are used in the paper, they are not demonstrated details in the discussion.

Author response: We have added a few additional details about the meshes used in this study (i.e., OviTex 1S and OviTex LPR) in the Discussion section.

In fact, LPR is used for laparoscopy, and has 4 layers, while 2S has 8 Layers, so the thickness difference is twice. If four layers worked so well, why use eight? In addition, in this study, there were 23 Sublay cases, and 5 IPOM and Intraperitoneal periods.

Author response: This study used OviTex LPR and OviTex 1S, which contain 4 and 6 layers (not 8) of ovine forestomach matrix, respectively. The selection of mesh wasn't based on number of layers so much as the size of defects being repaired. OviTex LPR was used for the ostomy closures while OviTex 1S was used for IPOM repairs. Results indicate that both four- and six-layer RTM materials yield favorable outcomes.

According to the description in the article, what is the difference between intraperitoneal and IPOM?

Author response: We apologize for being unclear. There isn't a difference between these synonymous terms; we have combined these into a single group in the revised manuscript.

This article is primarily a surgical, but none of the authors are surgeons.

Author response: The corresponding author, Dr. Amit Agarwal, is a hernia surgeon.

Therefore, some details information needs to be further clarified in the description of specific surgical methods.

Author response: It is unclear what specific details the review believes should be clarified. However, in an attempt to improve clarity, we have reviewed our description of the surgical methods and added some additional details.

Reviewer #2:

Scientific Quality: Grade D (Fair)

Language Quality: Grade A (Priority publishing)

Conclusion: Rejection

Specific Comments to Authors:

General comments: The authors reported the short-term efficacy of Reinforced tissue matrices (RTMs) in treating parastomal hernia and incisional hernia after stoma reversal. Twenty-eight patients underwent surgery using RTMs, and there was no hernia recurrence at 1-year follow-up. The incidence of mesh-related complications was relatively low (infection 7.1% and fistula 7.1%).

Specific comments: 1. Although the results may be encouraging, heterogeneity in multiple study parameters limits equitable evaluation and interpretation of the results, including patient characteristics and comorbidities, different hernia type (parastomal and/or incisional), different surgical approach (open/lap/robotic), variations in mesh types (1S/LPR), variations in additional surgical techniques (component separation), presence or absence of bowel anastomosis, variations in the

use of drains. In addition, the lack of control group does not allow direct assessment in the superiority of the RTMs over other mesh type.

Author response: The reviewer correctly noted the heterogeneity amongst several study parameters. However, we note that this study was not designed to include a narrow patient population and a closely matched control group in order to make mesh-specific comparisons based on clinical outcomes. Instead, this study presents a series of prospectively monitored patients treated by a single surgeon to report on results when using RTM meshes for incisional hernia repair and/or strengthen the abdominal wall after stoma reversal. Based on the positive results of the small patient population in this study, future studies could enroll a larger group of patients with more similar demographics and characteristics to evaluate mesh-specific comparisons in terms of surgical outcomes.

2. Surgical details (including the material used) without figures are very hard to understand for gastroenterologists and surgeons who are not familiar with hernia or abdominal wall surgery.

Author response: We have attempted to provide enough details of the surgical protocol and meshes utilized that a figure is not necessary; however, if the reviewers/editorial team feel that a figure would be beneficial, we are happy to comply.

3. One patient required mesh removal due to fistula and infection, but there was no hernia recurrence at 1-year follow-up. How did that happen?

Author response: The patient in question required a partial mesh removal, which area was likely granulated in. At the last follow-up (i.e., one year), the repair was still intact with no evidence of hernia recurrence.

Round 2

1. Specific Comments to Authors: The authors have revised the manuscript in accordance with the reviewers' comments and suggestions. Because this manuscript reports a novel surgical techniques with specific outcomes, it will be more valuable if presented with surgical figures. The authors have already answered that they were ready to comply (in response #2), please do so in the next revision process.

- We have included a new figure showing the meshes used in this study, which represent the novel aspect of this study.

2. We suggest changing the manuscript type to observational study and fill in the "strobe statement".

- We have changed the manuscript to be an observational study and included a completed STROBE statement.

3. Any article describing a study (basic research and clinical research) involving human and/or animal subjects is required to have the institutional review board (IRB) name, whether institutional (part of the author(s)' academic/medical institution, such as the Oak Grove Children's Hospital Institutional Review Board) or commercial/independent/private (contracted for-profit organizations, such as the ClinicCare Coalition for Human Rights Institutional Review Board), stated explicitly on the title page.

Please provide the approval file of Institutional review board, and state it on the page.

- We have added a statement about IRB approval and have included the approval letter.

4. Please provide informed consent (PDF) signed by the patient in the study (or a plain version), prepared in the official language of the authors' country to the system.

- We have included a copy of the patient consent form.

5. Please upload the table files.

- The tables have been uploaded separately in a docx file.