Dear Editor-in-Chief

We would like to thank you and the reviewers for taking precious time to review the manuscript and suggest excellent recommendations. The implementation of these recommendations has markedly enhanced the quality of the manuscript tremendously.

We have revised the manuscript as per the suggestions of the esteemed reviewers. However, if there are some shortcomings or any further new suggestions, kindly do let us know. We would be delighted to carry out the changes.

The changes have been highlighted in yellow colour in the revised manuscript and have been included here along with the response to the questions.

Thanking you once again

Pankaj Garg

Corresponding Author, on behalf of all authors

Reviewer's comments

This is the largest study of anal fistulas reported to date. One thousand three hundred fifty-one fistula procedures were performed in 1250 patients over 14 years at an exclusive fistula-care center. An exact algorithm was followed- fistulotomy was done for simple fistulas, and a novel sphincter-sparing procedure, TROPIS, was performed for high complex fistulas. It is really a massive work.

Ans: We would like to thank the Reviewer for these wonderful and encouraging comments profusely.

Here are some questions:

1. The study contains anal fistula plug, PERFACT and TROPIS surgery. I did not find out the records of the patient's symptoms at the same time, such as 6 months after surgery, 12 months. Please provide the cure rate between each group at the same time point after surgery.

Ans: We would thank the reviewer for this suggestion. The information has been added as recommended. As per protocol, the healing was assessed 6 months after

surgery and then at long-term follow-up. This has been included in the Methods and Results section.

Methods (Page-8)

The healing of fistula was assessed at 6 months after surgery and then at long-term follow-up.

Results (Page-10)

The success rate of the four procedures at 6 months and long-term follow-up was also compared. At 6 months, the healing rate of AFP, PERFACT, TROPIS and fistulotomy procedures was 69.4% (34/49), 71.4% (120/168), 78.9% (314/398) and 97% (583/601) respectively. On the other hand, the overall healing rate at long-term follow-up of AFP, PERFACT, TROPIS and fistulotomy procedures was 19.4% (6/31), 50.3% (75/149), 86% (307/357) and 98.6% (511/518) respectively.

2. When facing a patient who failed in PERFACT or TROPIS, Will they undergo a second operation by using the same surgical method or TROPIS? How to choose?

Ans: We would thank the reviewer for raising this pertinent query. This has been answered in the Methods section (Page-6).

In case of a recurrence in the fistulotomy group, fistulotomy was done again. However, when a recurrence occurred after TROPIS procedure, then TROPIS was repeated if a high tract persisted and fistulotomy was performed, if only a low tract remained (Figure 2). Before 2015, PERFACT was the main procedure done for high fistulas. So, after a recurrence after PERFACT procedure, the same procedure was repeated. Before after 2015, TROPIS procedure was performed in patients who had a fistula recurrence after previously done PERFACT procedure because the success rate of TROPIS procedure was much higher than PERFACT procedure.

3. Incontinence is an unavoidable problem of high complex anal fistula. We hope to see dynamic changes in the evaluation of incontinence, which is very important for the satisfaction and evaluation of postoperative anal fistula.

Ans: We thank the learned reviewer for this suggestion. This been added to the study's limitations in the Discussion section (Page-17)

Second, though the continence was assessed by objective continence scores, anal manometry would have added more value to the study. Apart from high recurrence rate, incontinence is main challenging issue in management of high complex anal fistulas. So, the thorough and accurate assessment of continence levels before and after fistula surgery is very important for the patient satisfaction and objective evaluation of success of any fistula procedure. Therefore, incorporation of anal manometry in the patient evaluation would have added additional value to the study.

4. TROPIS surgery will cut a large area of mucosa, and the depth of incision is deeper. What are the incidence of postoperative complications, such as bleeding and anal stenosis?

Ans: Thanks a lot, to the esteemed reviewer for raising this point. The postoperative complications have been added to the Results section (Page-10,11).

There were few complications reported after these procedures. Bleeding from the post-operative wound occurred in 14/618 (2.3%) after fistulotomy, 12/456 (2.6%) after TROPIS, 2/216 (0.9%) after PERFACT and none after AFP procedures. The bleeding was controlled with conservative measures (gentle pressure on the wound for few minutes) in all the patients except one patient in fistulotomy and two patients in the TROPIS group, who were required to be taken to operating room for suture ligation of the active bleeder. There was no stenosis or stricture formation after the TROPIS procedure as the mucosal wound involved less than one-thirds of the anal circumference in all cases. The main complication after AFP was plug extrusion. It happened in 11/61 (18%) AFP procedures performed. In these 11 patients with plug extrusion, the fistula recurred in six patients, three patients were lost to follow-up and the fistula healed in two patients.

Once again, we thank the reviewers and editorial team of World Journal of Gastrointestinal Surgery for their kind consideration of our manuscript. Please let us

know if you feel any issue has not been adequately addressed or if you have any further queries

Yours sincerely,

Pankaj Garg