

## **RESPONSE TO REVIEWERS**

### **Reviewer #1:**

The authors aimed to compare Endoscopic gastrostomy (PEG) and Radiologic gastrostomy (PRG) for enteral feeding concerning the complication. They selected comparative studies of PEG and PRG following the Preferred Reporting Items for Systemic Reviews and Meta-analyses guidelines. They disclosed that the only outcome that showed a significant difference was tube related complications. They concluded that PEG has lower levels of tube-related complications (such as dislocation, leak, obstruction, or breakdown) when compared to PRG. This manuscript appears nearly acceptable for publication, but there should be a more thorough discussion about the hypotheses that PRG caused tube-related complications more frequently.

**Thank you for your comments. We considered all your valuable suggestions and made several corrections to the revised version of the manuscript. We are optimistic that the quality of our manuscript has improved after your review.**

In the analyzed studies, the types, brands, and sizes of tubes were not differentiated. This heterogeneity may influence the results of this analysis. The meta-analysis of observational studies demonstrated a statistically significant difference in the incidence of tube-related complications of a PEG and PRG, such as dislocation, leak, obstruction, or breakdown, showing a higher incidence in PRG. In the RCT meta-analysis, there was no difference. However, the observational studies included 464,489 patients versus 200 patients from RCT studies and this should be considered if the RCTs were underpowered to detect a small difference between the techniques. A difference may be expected due to the size difference between endoscopic and radiological techniques. PEG is usually performed using 20FR or 24FR tubes whereas PRG uses 14-16 FR (42). The size of the gastrostomy ostium influences the incidence of migration; a smaller caliber is associated with a higher incidence of migration and obstruction. The feeding tube can become blocked due to various reasons, such as the accumulation of food formula, medications, or debris. Smaller tubes increase the probability of the tube becoming blocked. Leaks can occur around the insertion site or through the tube itself, which can cause skin irritation and infection, so if the size of the skin insertion is larger than the tube caliber there is a greater chance of leakage.

Furthermore, there are several grammatical and spelling errors, e.g. e 17 (lines 4 of 1st paragraph of Discussion), although (lines 17 of 9th paragraph of Discussion), Strengths (lines 4 of 10th paragraph of Discussion).

**Thank you for your observation, we have corrected.**

**This manuscript will be fully reviewed by Dr. Roberto Paolo Trasolini, a native English speaker and current interventional endoscopist and medical doctor of Department of Gastroenterology, Hepatology Brigham and Women's Hospital Harvard Medical School.**

## **ANSWERS:**

### **Reviewer #2:**

The review of the manuscript: Endoscopic versus Radiologic gastrostomy for enteral feeding: a systematic review and meta-analysis The authors submitted the first systematic review on comparing two mostly used techniques for introducing feeding tubes.

**Thank you for your comments. We considered all your valuable suggestions and made several corrections to the revised version of the manuscript. We are optimistic that the quality of our manuscript has improved after your review.**

Numbered comments:

1. The fonts of the text should be equivalent trough the manuscript, there are also some typo errors.  
**We have already adjusted this. Thank you for your observation.**
2. The introduction is to short and it should mention also surgical gastrostomy procedures. Surgical technique is mentioned at the discussion part where I believe it is not necessary.

**Thanks for your suggestion. We have included more details about this important topic in the Introduction.**

The method of percutaneous endoscopic gastrostomy (PEG) was first used in 1980 by Gauderer and Ponsky (2). The technique was developed as a minimally invasive feeding route for neurologically impaired patients. The first

gastrostomy was performed in the 19th century, and Stamm's technique, surgical gastrostomy described in 1894, was long considered standard for performing a prolonged enteric access. The surgical technique became less performed with the emergence of the endoscopic technique

3. What is the reason to exclude pediatric studies? However, I believe that you should exclude studies with PEGJ.

**Thanks for your suggestion. Although the general technique is similar, pediatric and adult gastrostomy differ in terms of tube size, insertion hole size, anesthesia, indications for the procedure, and post-procedure care. For this reason, in this metanalysis we chose to exclude the pediatric population. We kept the comparison with studies including PEGJ because there are only one randomized studies with only PEG yet.**

4. In my opinion it is to many tables, however the text can be longer.

**Thanks for your suggestion. We have included more details in the Discussion. We have chosen to keep the tables, because the outcomes analyzed are common and important complications in the comparison between the two techniques.**