



# Feasibility of laparoscopic Witzel feeding jejunostomy

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Feeding jejunostomy is performed to create an enteral nutritional route when the esophagus or upper gastrointestinal tract is not available. There are many techniques used for feeding jejunostomy: longitudinal Witzel, transverse Witzel, open gastrojejunostomy, needle catheter technique, percutaneous endoscopy, and laparoscopy [1]. In the past, open feeding jejunostomy was the primary procedure, but recently laparoscopic feeding jejunostomy (LFJ) has been widely performed because LFJ has the advantages of a minimally invasive technique, such as decreased postoperative pain, morbidity, and length of hospital stay [2].

Although several techniques of LFJ have been described, the Witzel approach has not been performed widely due to perceived difficulties in suturing the bowel around the tube and anchoring it to the abdominal wall [3,4]. For these reasons, Witzel feeding jejunostomy has limited literature reports (compared with open jejunostomy) and has not been widely discussed as a routinely performed laparoscopic procedure [5,6].

Varshney et al. [5] analyzed pooled data from 41 patients who underwent open or laparoscopic Witzel feeding jejunostomy at their institution between 2018 and 2022. This study is one of the few studies comparing open and laparoscopic procedures using only the Witzel technique. In the authors' series, the median operative duration was more in the LFJ group (180 minutes vs. 60 minutes,  $p = 0.01$ ). The median postoperative

length of hospital stay was shorter in the LFJ group (3 days vs. 4 days,  $p = 0.08$ ). Four patients suffered from immediate postoperative complications in the open group: two patients had surgical site infections (SSIs), one patient required reoperation for intussusception, and the remaining patient required percutaneous drainage of a pelvic fluid collection. There was no 30-day mortality in either group. Fewer patients in the LFJ group suffered complications within 30 days of discharge such as tube dislodgement, tube clogging, and SSI compared with the open group. The LFJ group showed better results than the open group in terms of length of hospital stay and early and late postoperative complication rates. Regarding the difference in the operative time, the authors explained that the operative time decreased with increasing laparoscopic surgery experience and concluded that this was most likely due to a learning curve.

The Witzel approach is often the preferred procedure during open surgery for several reasons [3]. In this study, the authors demonstrated that laparoscopic Witzel feeding jejunostomy is a safe and feasible procedure. Therefore, laparoscopic Witzel feeding jejunostomy is a technique with sufficient advantages and should be included as a surgical option for an enteral nutrition route.

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## NOTES

### Conflict of interest

The author has no conflicts of interest to declare.

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