Laparoscopic jejunostomy (with video)

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TEXT (437 words):

Jejunostomy is a common surgical procedure in which a feeding tube is placed into the lumen of the proximal jejunum in order to administer enteral nutrition. Mostly, this surgical procedure is performed in patients with upper gastro-intestinal tumors but also in patients with complicated bariatric surgery when oral feeding should be avoided for several weeks. Due to the potential risk for gastro-esophageal reflux, a jejunostomy is often preferable to a gastrostomy. Moreover, it is considered that potential benefits of the jejunostomy may balance the risks of this procedure, which are related to postoperative obstruction or migration of the tube, cutaneous or intra-abdominal abscesses, entero-cutaneous fistulas, intestinal occlusion, and intestinal ischemia (1). This video shows the different steps necessary to perform this procedure. We have performed 54 jejunostomies from 2016 to 2020 using this laparoscopic approach, without major postoperative complications, any need for conversion to open surgery. Among those 54 laparoscopic jejunostomy procedures, two

of them (4 %) required a catheter replacement after accidental removal, and four of them (8 %) had an early catheter obstruction requiring a second laparoscopic exploration with replacement of the clogged catheter. The operation was performed under general anesthesia with supine patient in Trendelenburg position and with surgeon and assistant placed on the patient's right. After exposition, a 9-Fr needle catheter jejunostomy (Kangaroo™ Jejunostomy Kit - Covidien) was placed about 30 - 50 cm from the ligament of Treitz. A 10 mm trocar was placed at the umbilical level for a 30 degree scope and other two 5 mm operatives trocars were placed in the right upper quadrant and in the right lower quadrant, respectively (Figures 1 and 2). After placing the tube into the jejunum, we used a V-Loc 3-0 to secure the loop of jejunum to the anterior abdominal wall (Figures 3 and 4). No routine distal jejunal fixation to prevent potential volvulus was performed, except in 9 patients with 3 distal interrupted stiches of Vicryl 4-0. No postoperative episode of intestinal obstruction was observed. Mean operating time was 47 minutes and patients seemed to have less postoperative pain, shorter hospital stay, and more rapid return to normal activities in comparison with open jejunostomy. Laparoscopic suture of the jejunum to the anterior abdominal wall is the most difficult part of the procedure because of the tangential view of the scope and instruments. There are different techniques used to perform a jejunostomy but the open approach remains the most popular, mainly because of these difficulties (2,3). This video shows a reproducible stepwise technique to perform a laparoscopic jejunostomy. It will be helpful for all surgeons having to perform this common, simple but sometimes difficult procedure.

Disclosure of interest

The authors declare that they have no conflict of interest.

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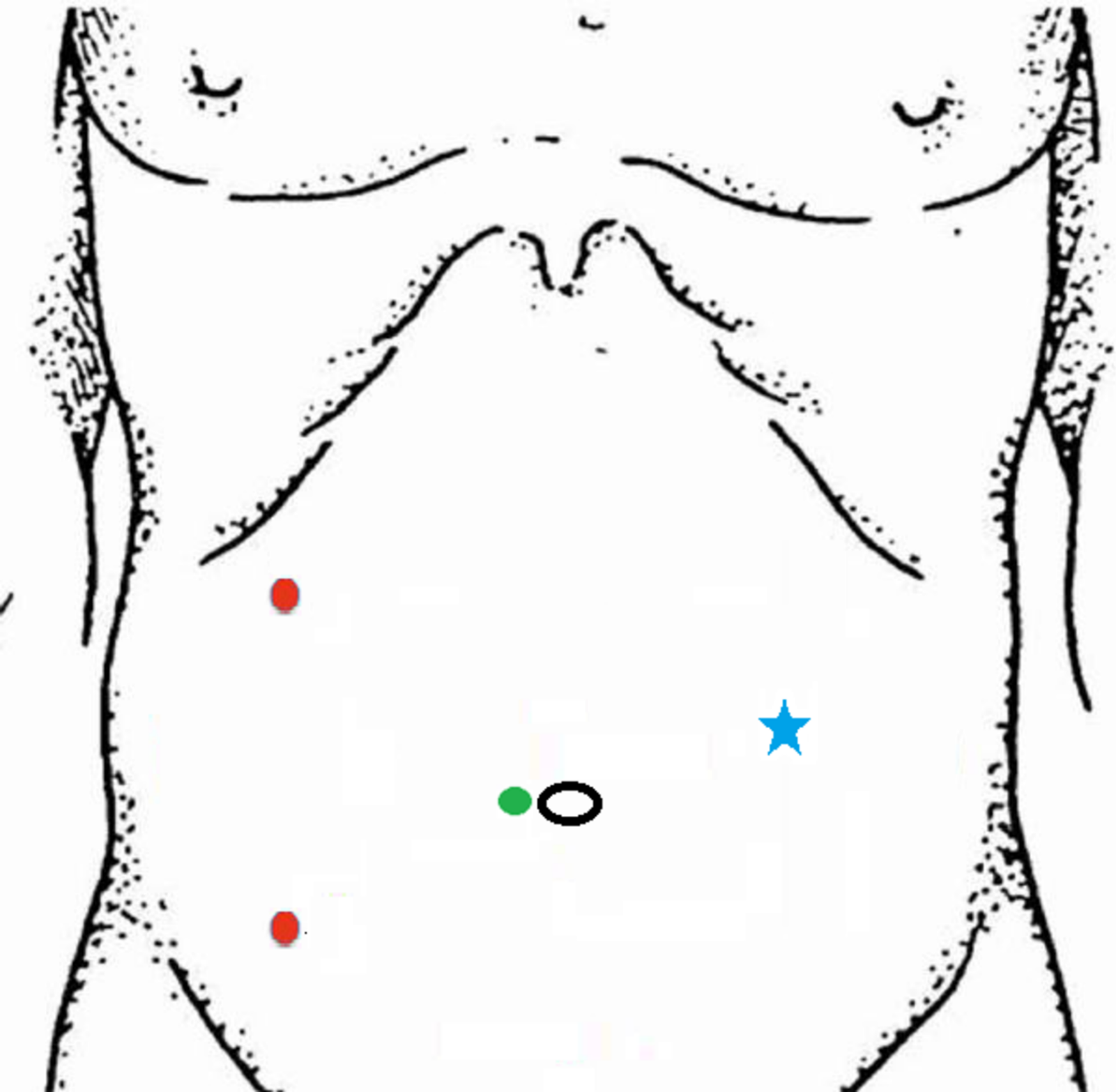
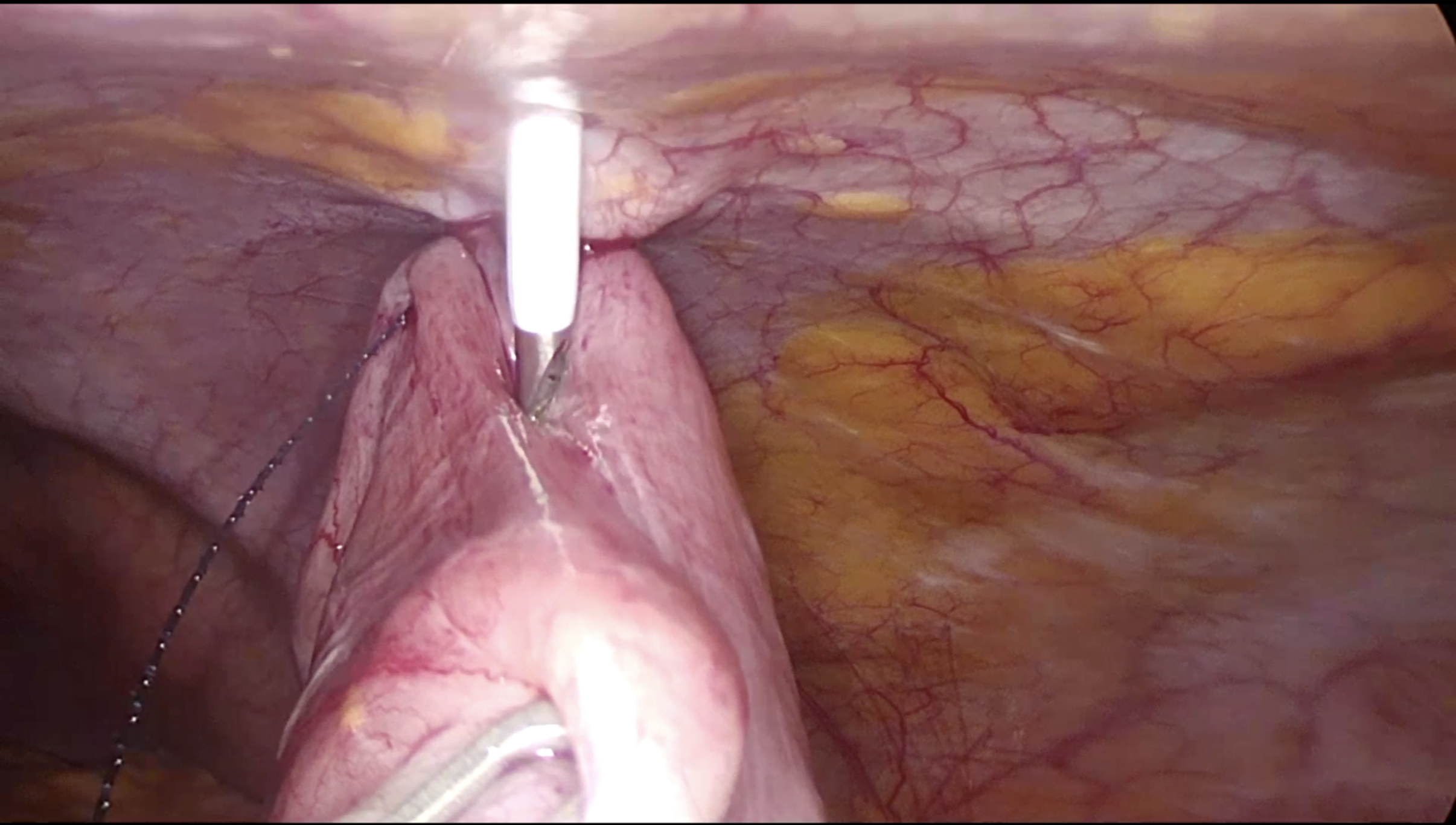
Figure 1. Port placement for the laparoscopic jejunostomy.

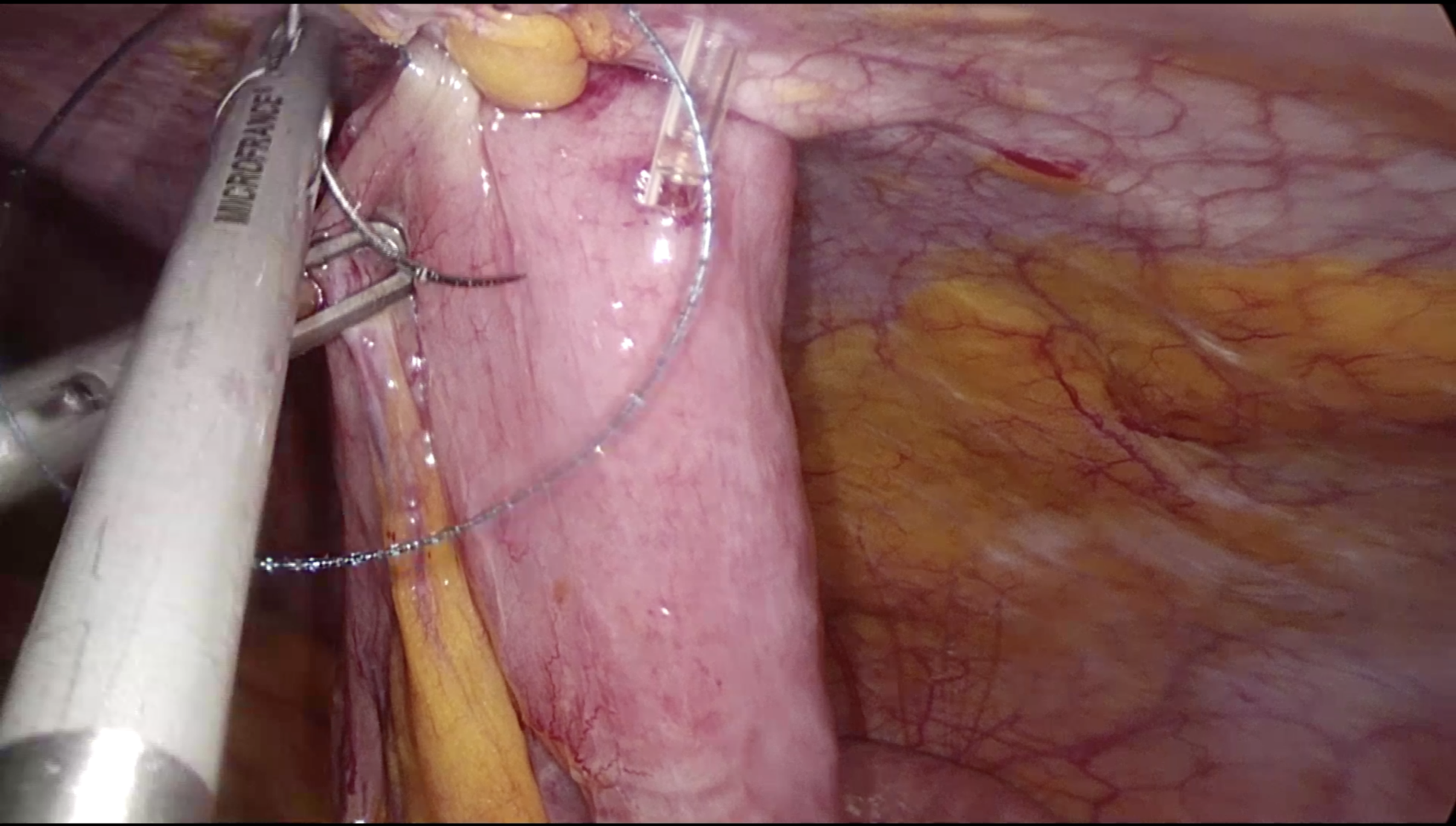
Figure 2. Jejunostomy tube placement.

Figure 3. Small bowel fixation.

Figure 4. Jejunum sutured to the anterior abdominal wall.



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