FRESENIUS KABI

Freka® FCJ (Fine Needle Catheter Jejunostomy)

direct postoperative enteral nutrition

Product Code: 7755645

Product features and surgical technique for healthcare professionals

Laparotomy surgical technique

Laparoscopic surgical technique

9
FR

freka.com.au

Product features

Design and suitability

The Freka FCJ, also known as fine needle catheter jejunostomy, is a polyurethane enteral feeding tube that can be placed intraoperatively following abdominal surgery. It is used for early postoperative intrajejunal long-term feeding.

The Freka FCJ allows postoperative nutrition despite an atonic stomach. Feeding can start 4-24 hours post surgery at a rate of up to 20 mL/hr.

Laparotomy suitability

- major upper abdominal surgery (oesophagus, stomach, pancreas)
- multiple trauma patients with abdominal operations
- as an alternative for situations in which less invasive intubation procedures are not possible.

Laparoscopy suitability

- neoadjuvant chemotherapy in stenosed oesophageal tumours
- tumour recidivations following oesophageal resection or gastrectomy
- tumours of the upper gastrointestinal tract that no longer allow an endoscope to pass.

Absolute contraindications	Relative contraindications
Distal GI tract obstruction	Immune supression
Intestinal atony	Radiation enteritis
Peritonitis	Pancreatitis
Blood clotting disorders	Crohns (risk of fistulisation)
Sepsis	Ascites
	Peritoneal carcinoma

Feeding lumen

1.9 mm lumen, 9 FR with ENFit connector (jejunal). One rounded terminal opening on feeding tube. 75 cm length, 2.9 mm outer diameter.

Feeding tube ENFit	**Length:**	75 cm
	FR:	9
	ID:	1.9 mm
	OD:	2.9 mm

Radiopaque markings

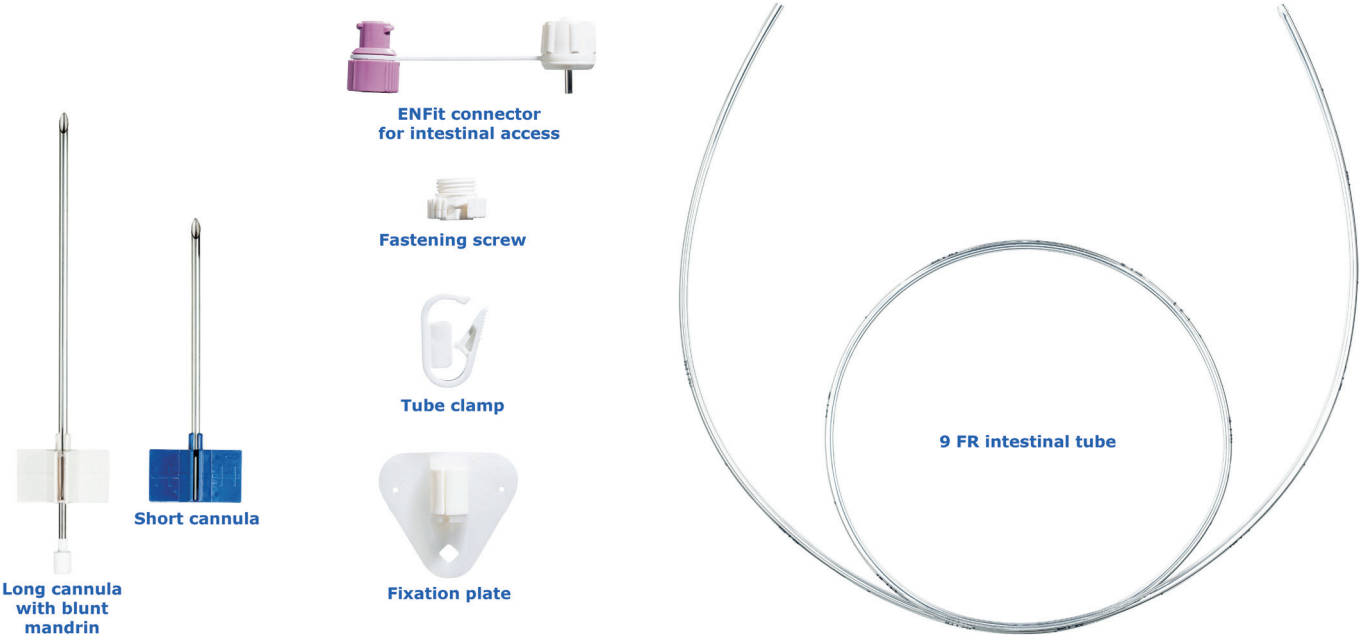
Radiopaque strip along tube length. Numbered every 5 cm with intervals every 2.5 cm.

Latex free, Luer free, PVC free and DEHP free

Repair kit

As the Freka FCJ is indicated for long-term feeding it may be necessary at some point to replace the ENFit connector or the tube clamp. A repair kit is available to facilitate replacement of these components allowing the Freka FCJ enteral feeding tube to remain in situ.

Included in the kit

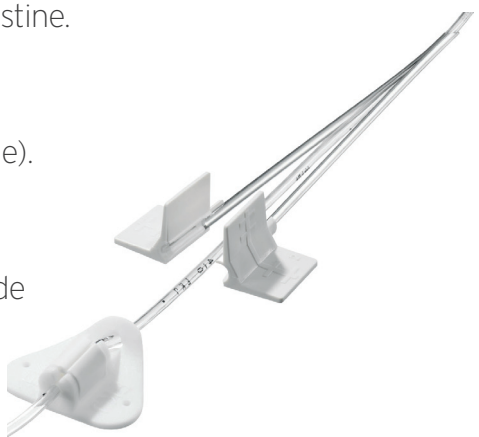


Freka FCJ 9 FR, single lumen enteral feeding tube

75 cm length, 9 FR intestinal tube.

Long cannula

13 cm split cannula used to puncture the intestinal wall (white). Contains a removable blunt mandrin for safe advance of cannula when required within intestine.



Short cannula

10.5 cm split cannula used to penetrate the abdominal wall (blue).

Tube clamp with side walls

Used to open and close the enteral feeding tube. Clamp has side wall protection to minimise false clamping.

Freka ENFit connector

Allows connection to the intestinal tube. Integral cap. ENFit.

Fastening screw

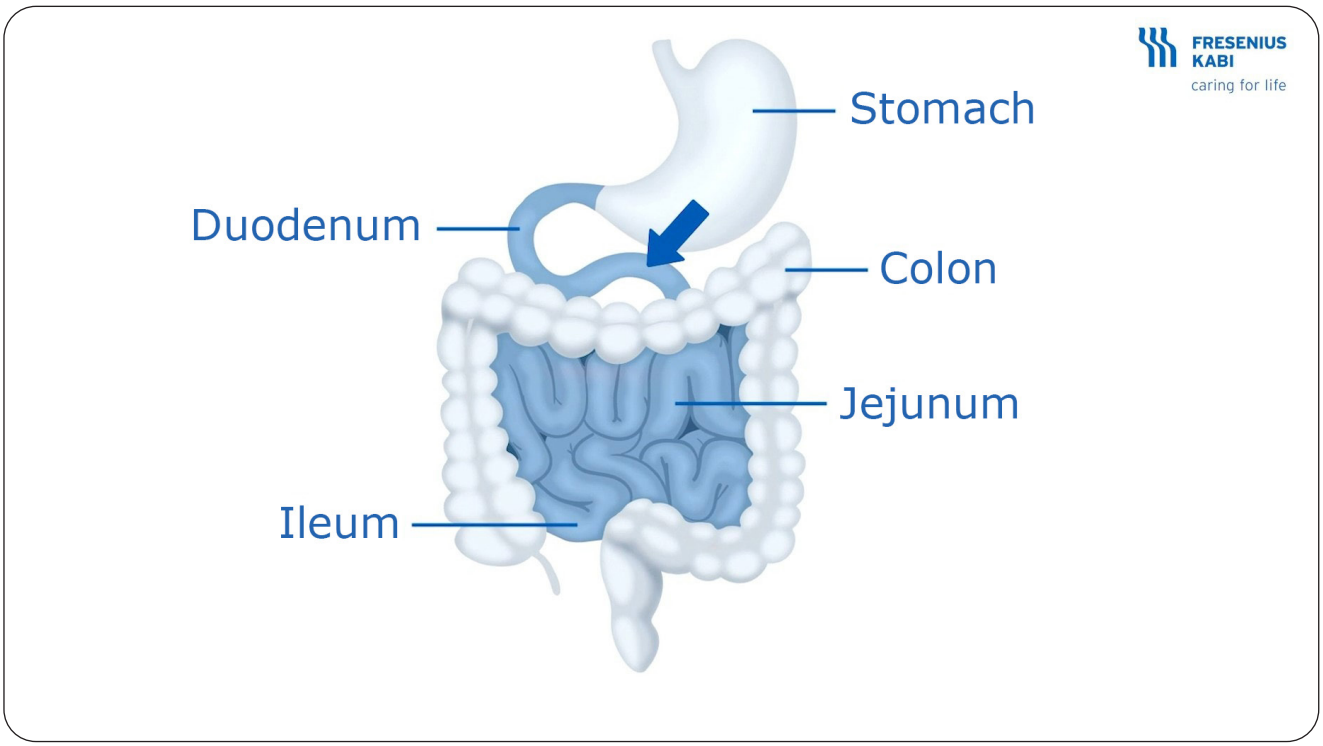
Secures the Freka ENFit connector to the enteral feeding tube..

Fixation plate

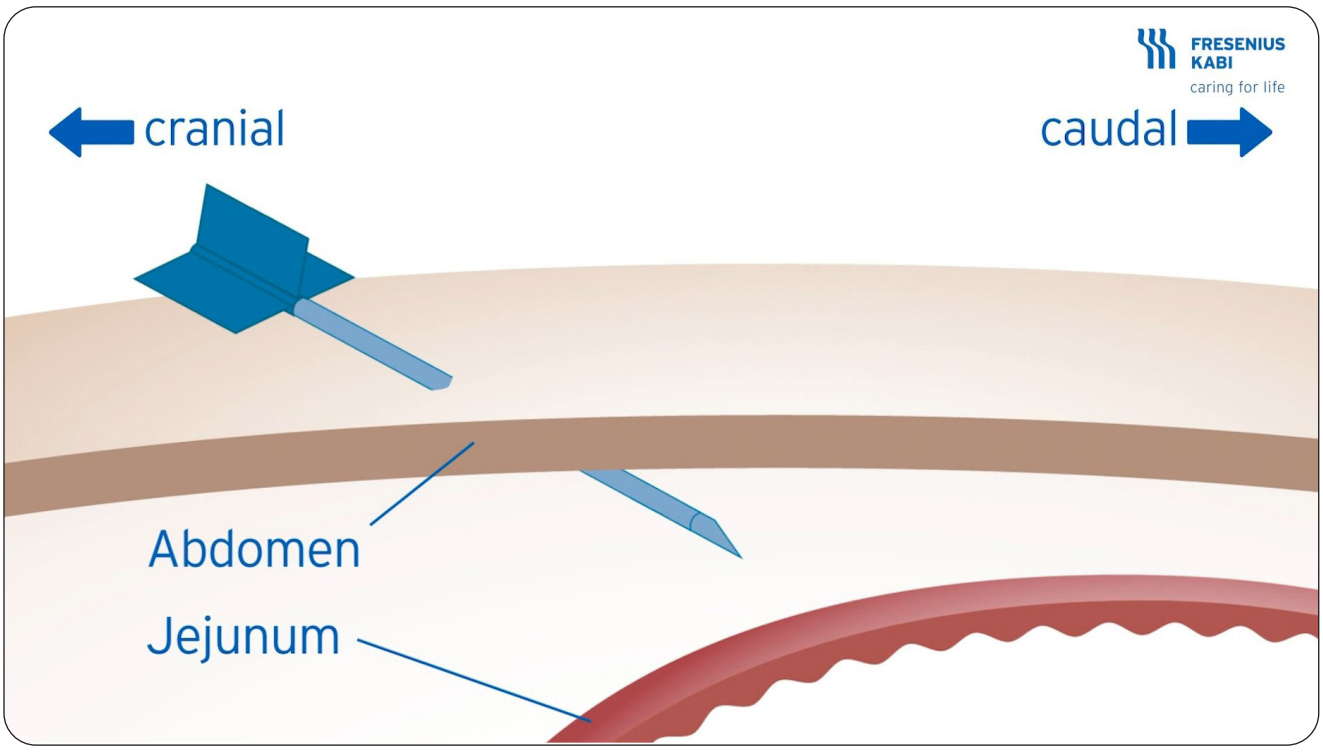
External fixation plate for securing the enteral feeding tube. Two suture holes for fixation. Made of silicone rubber for patient comfort.

Surgical technique

Laparotomy technique with splitting cannula: Diagrammatic version

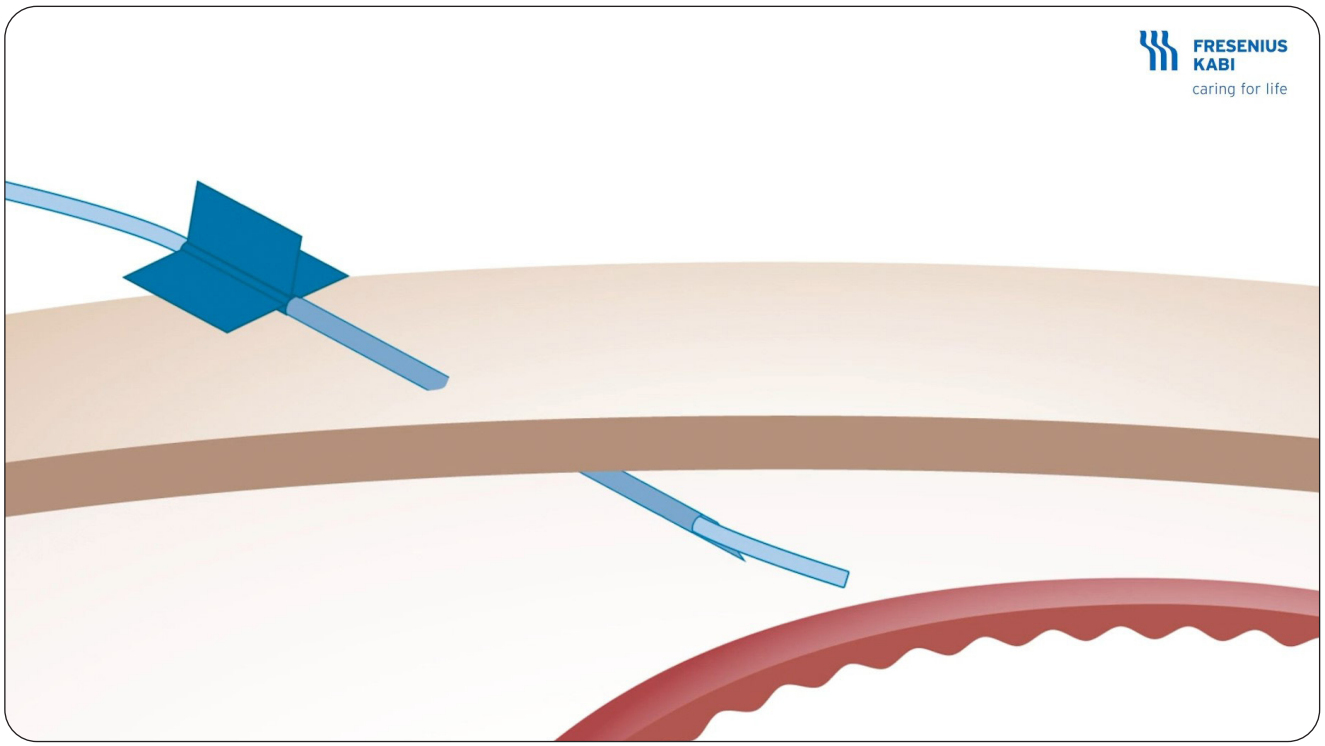


The Freka FCJ is placed at the end of a major abdominal surgery. The entry point of the tube is in the first duodenal loop.

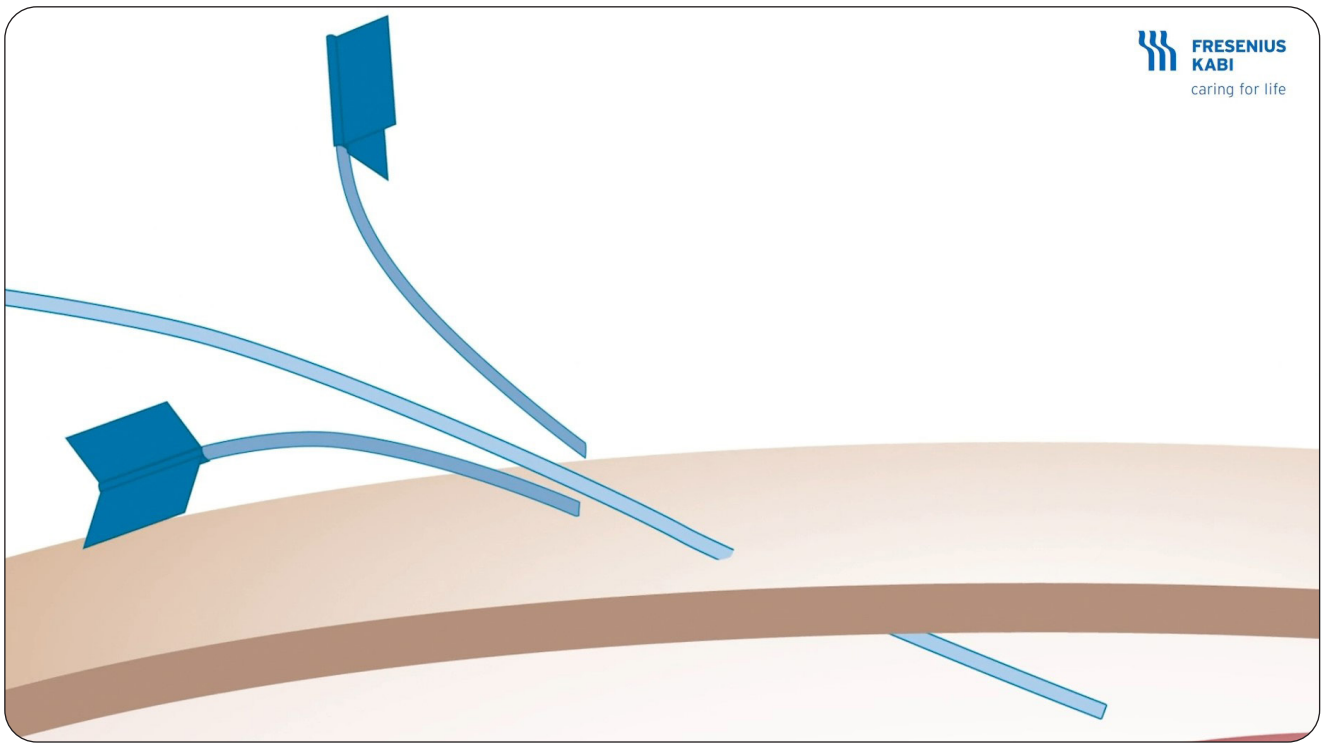


Puncture the abdominal wall diagonally with the blue cannula from cranial to caudal.

Laparotomy technique with splitting cannula: Diagrammatic version

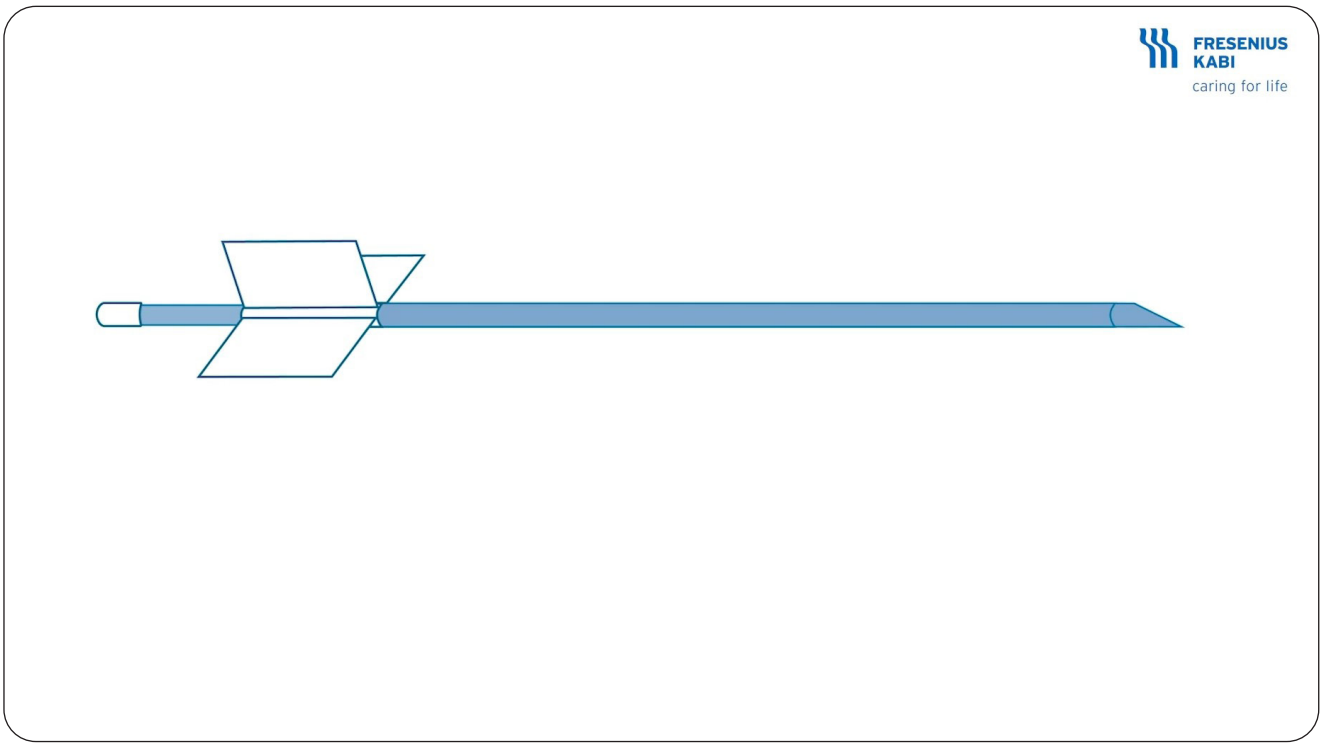


The feeding tube is guided into the gastric cavity from the outside inwards through the split cannula.

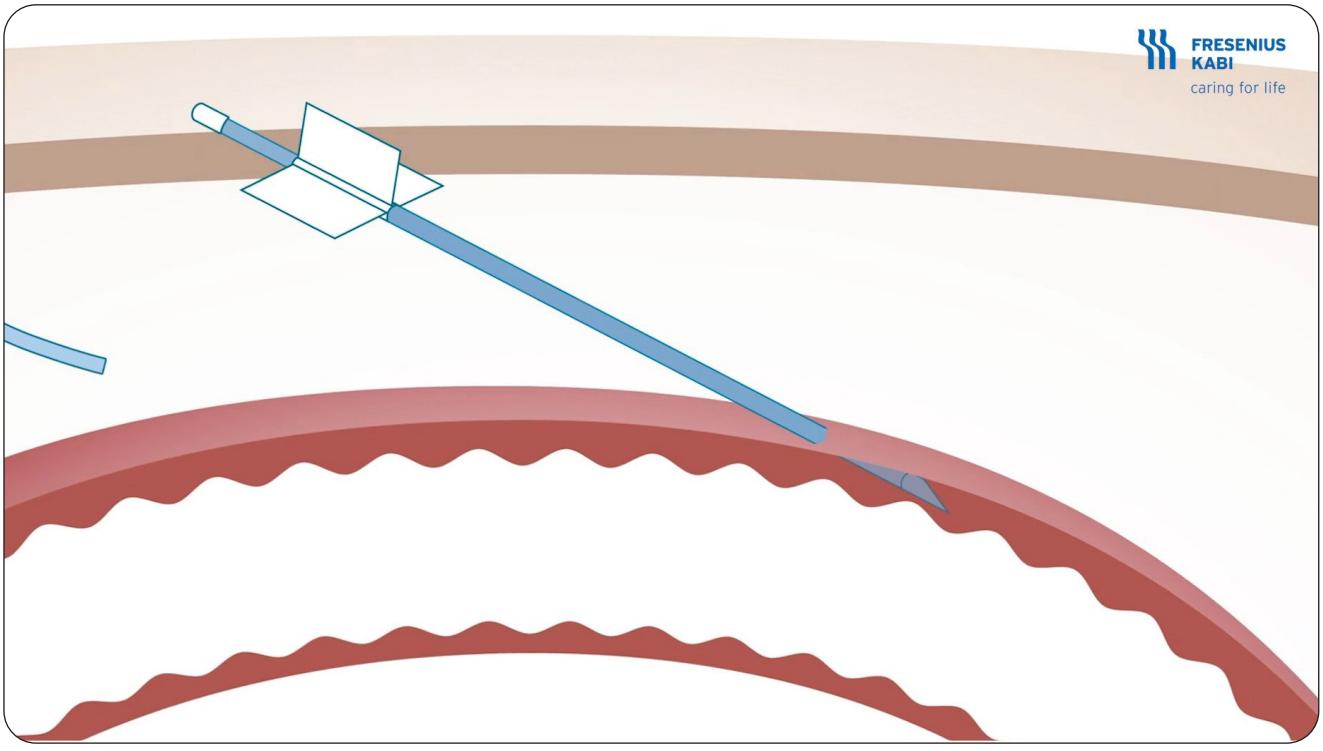


Remove the split cannula.

Laparotomy technique with splitting cannula: Diagrammatic version

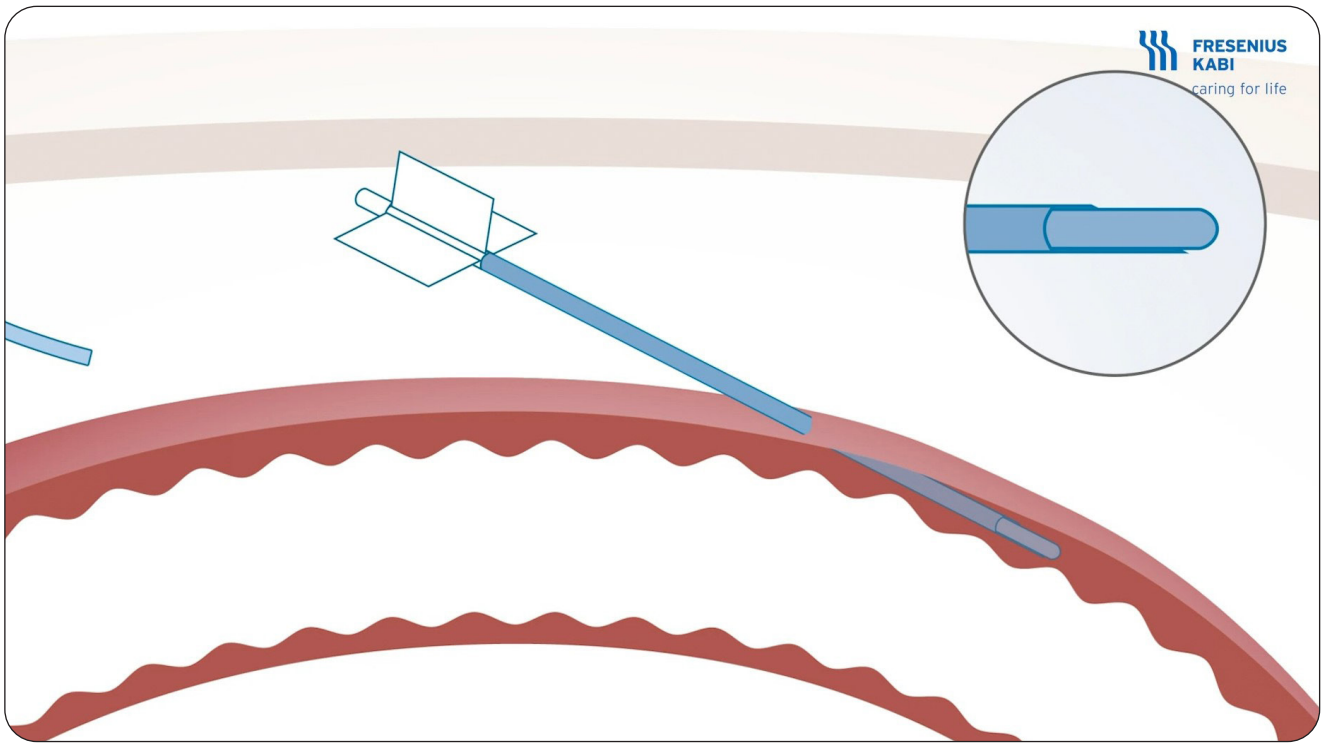


The mandrin of the white cannula is retracted slightly to expose the sharp tip.

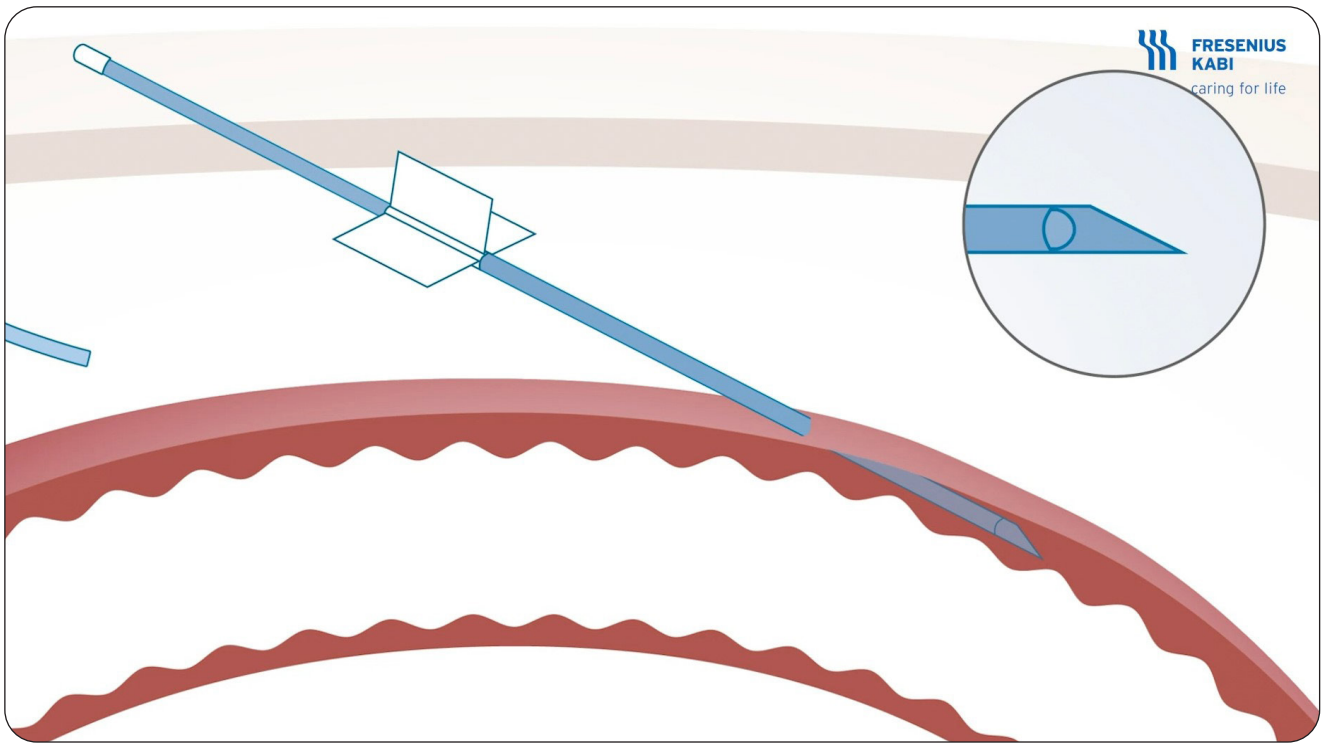


Puncture in the opposite direction of mesentery into the wall of the intestine beyond the ligament of Treitz (the tip of the tube should be remote from the duodenojejunal flexure).

Laparotomy technique with splitting cannula: Diagrammatic version

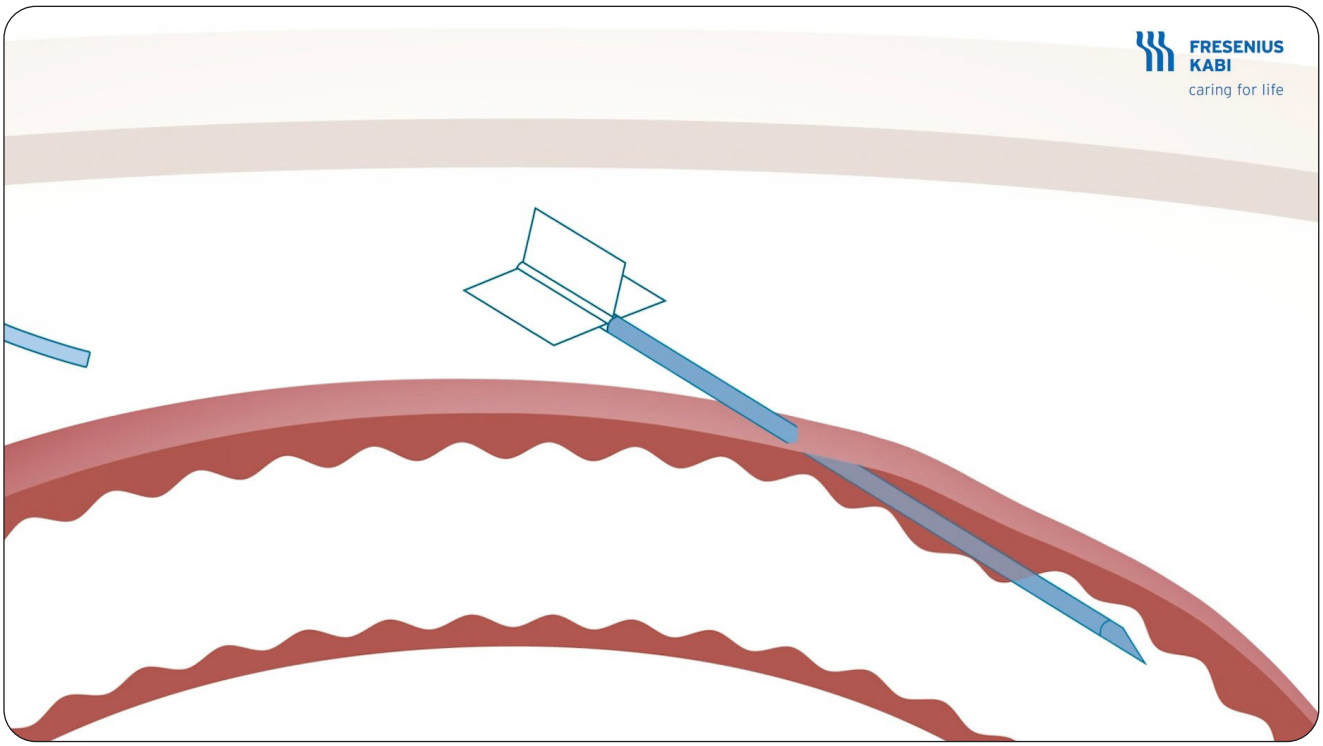


The mandrin is fully advanced again into the cannula and the cannula advanced approx. 5 - 10 cm.

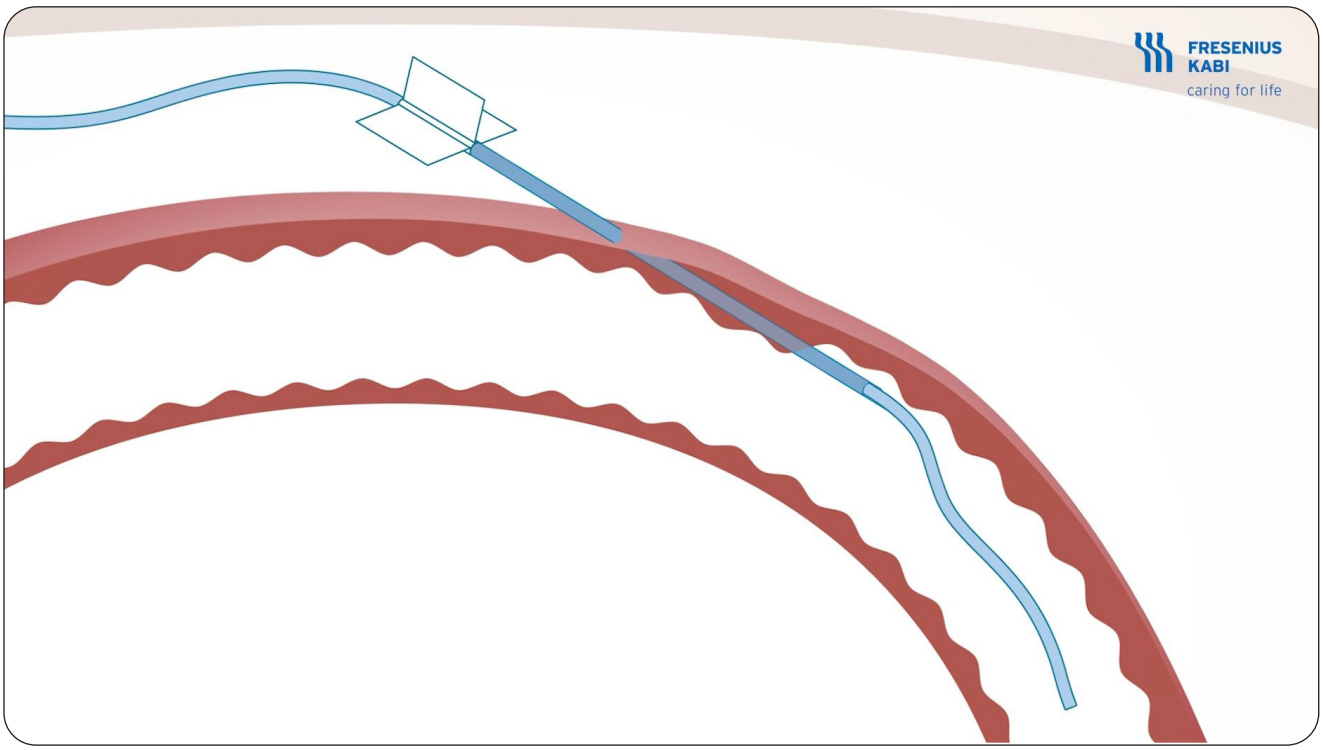


Remove the mandrin from the cannula.

Laparotomy technique with splitting cannula: Diagrammatic version

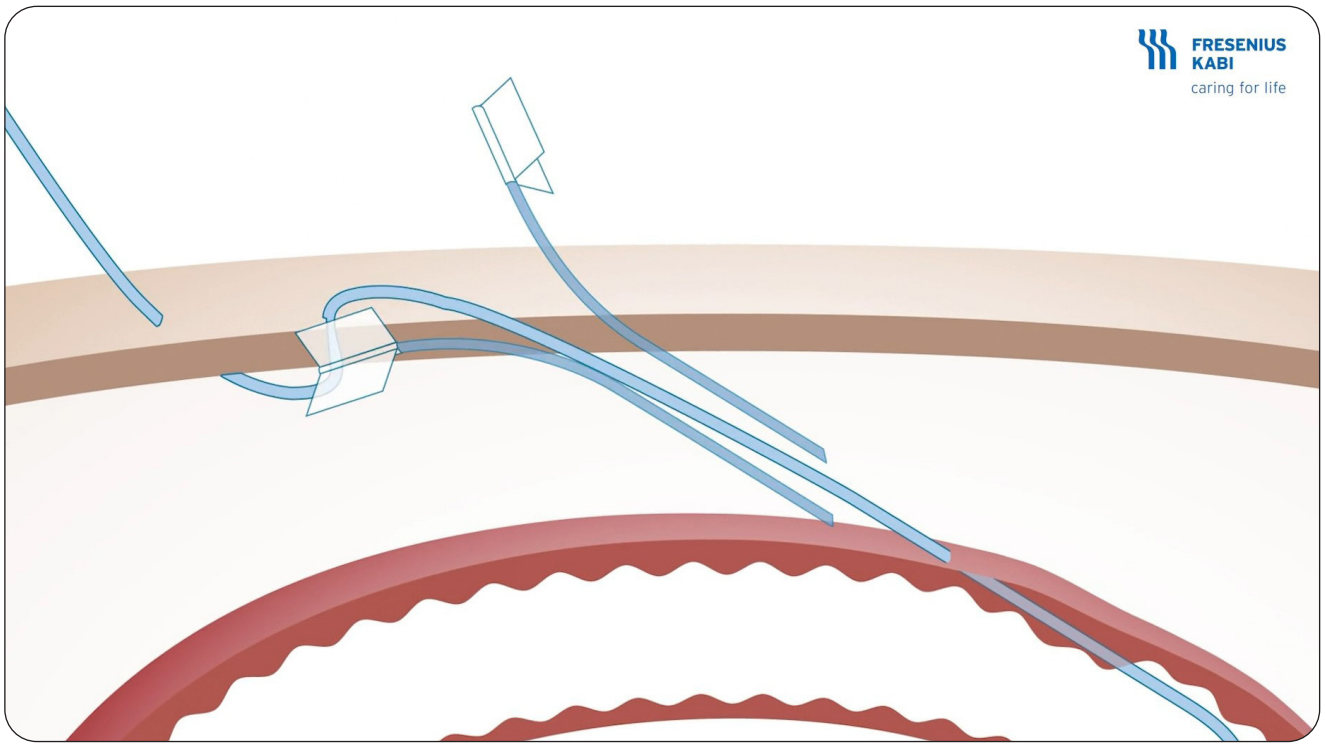


Use the cannula to puncture the lumen of the intestine.

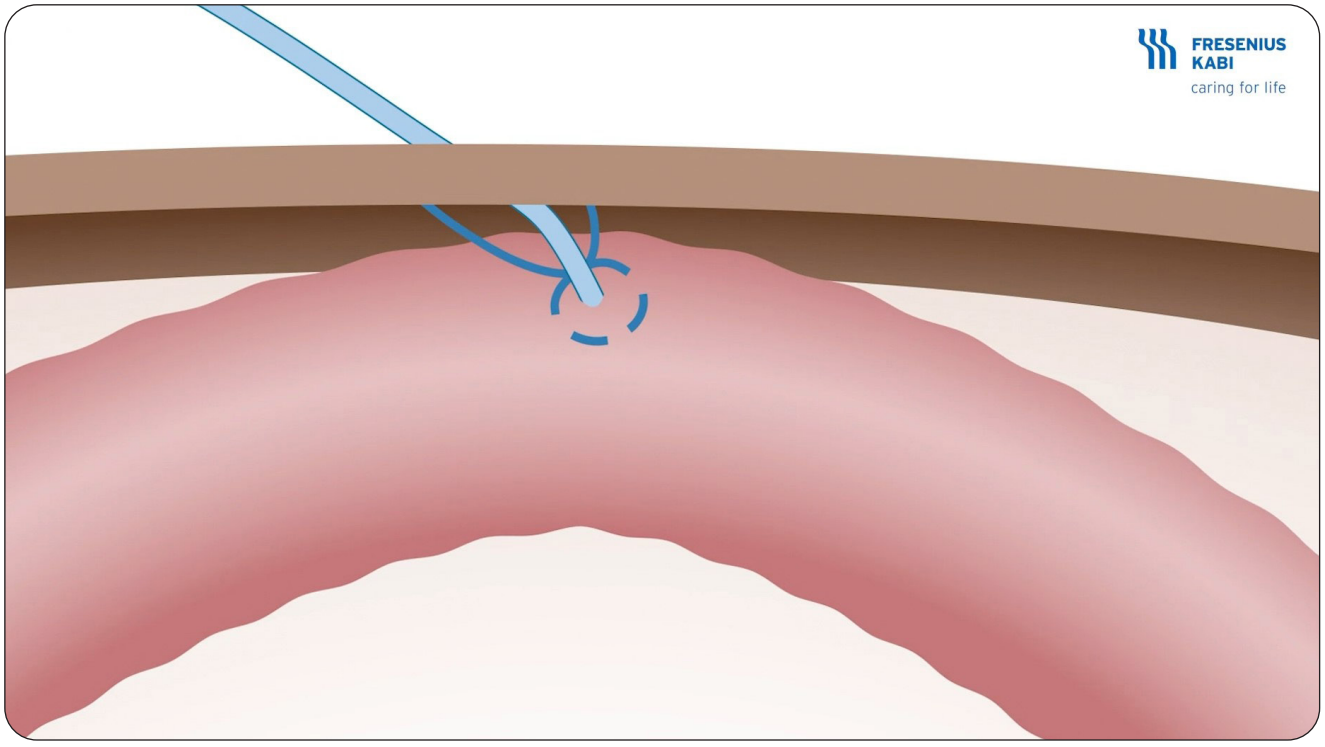


Push the feeding tube forwards through the cannula into the lumen of the intestine and slide forwards until it is approximately 30 cm into the lumen, with digital control.

Laparotomy technique with splitting cannula: Diagrammatic version

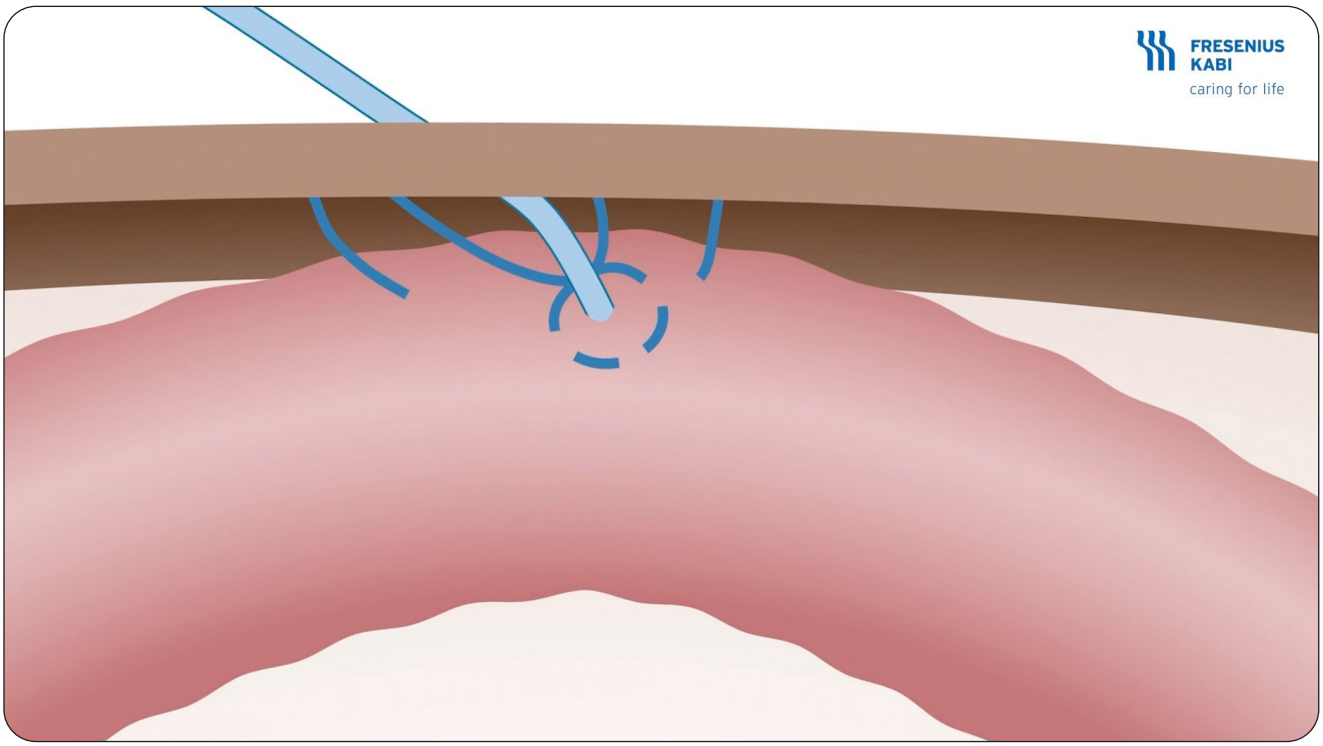


Withdraw the cannula over the tube and remove after splitting.

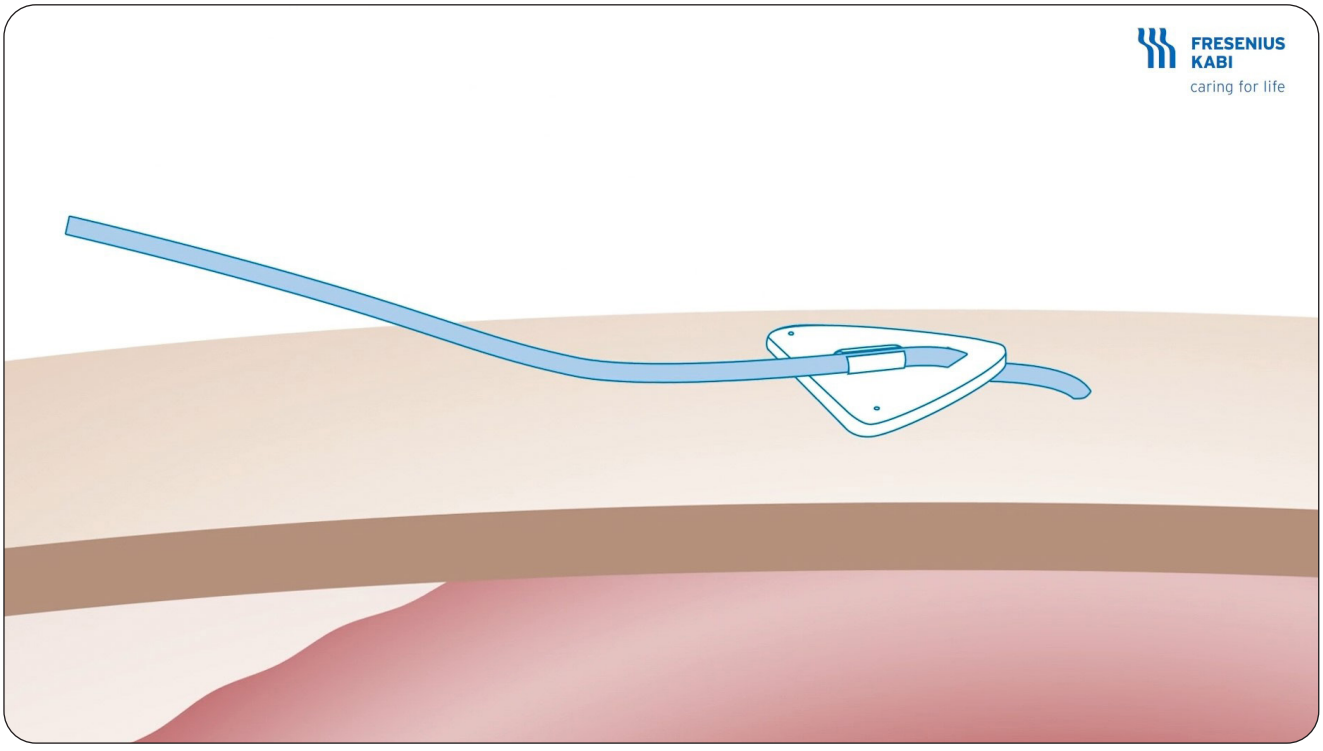


Insert dissolvable purse-string sutures, which are first knotted around the puncture point as invaginated sutures and which serve as a temporary fastening at the parietal peritoneum.

Laparotomy technique with splitting cannula: Diagrammatic version

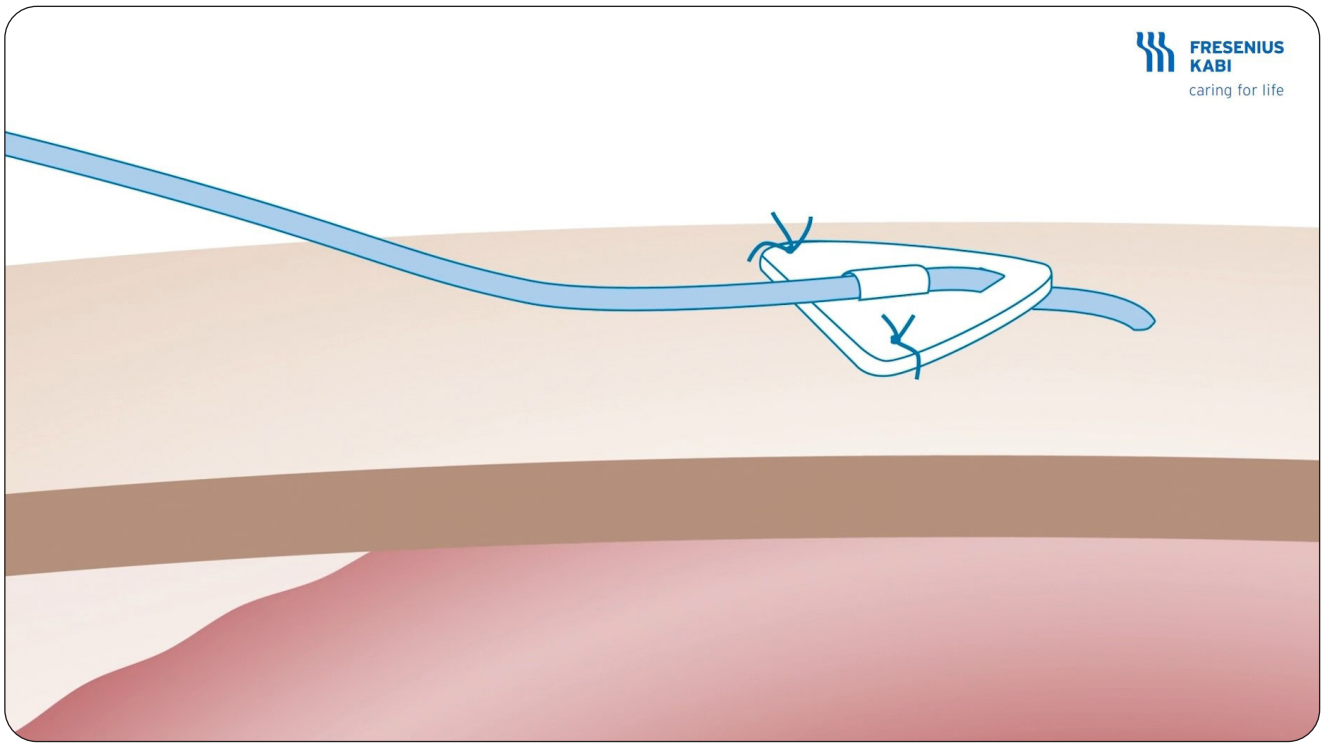


Attach the intestinal loop to the parietal peritoneum. The intestine should also be sutured to the peritoneum a few cm's above and below the point of entry to prevent dislocation due to rotation.

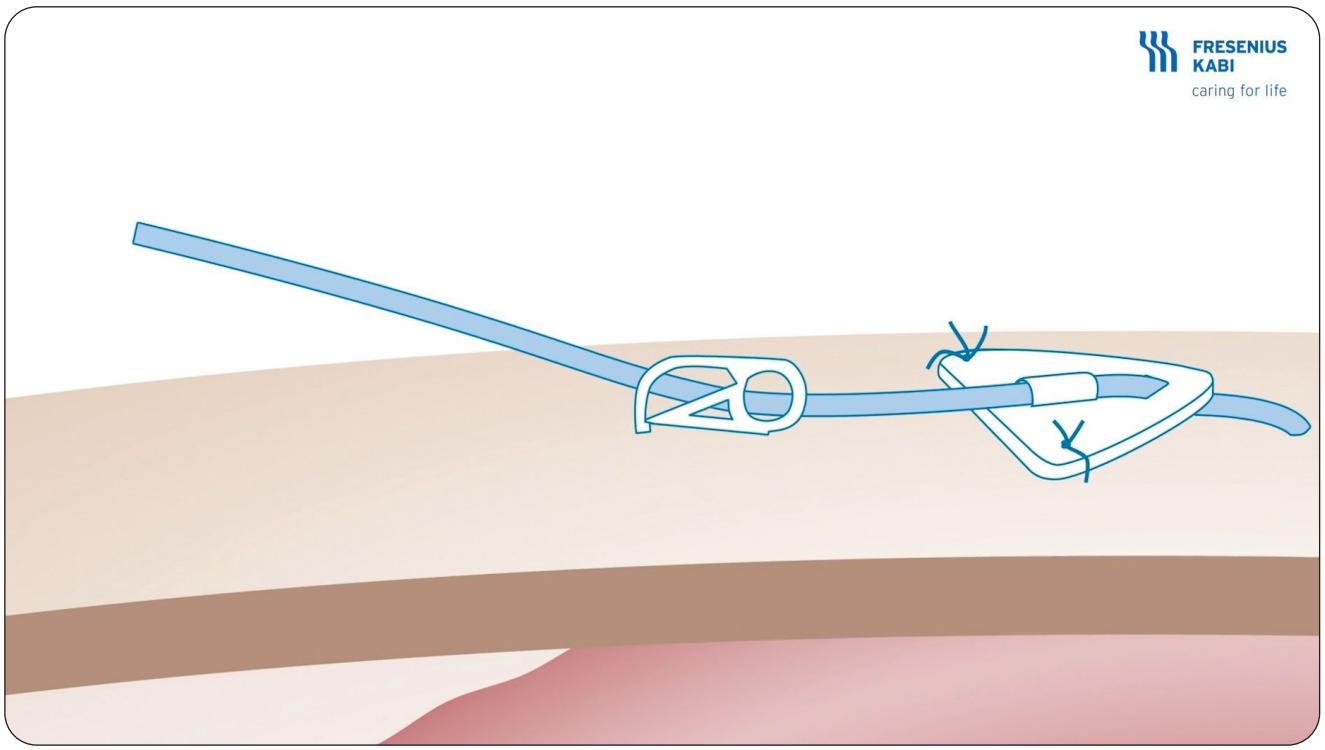


Insert the fixation plate over the end of the feeding tube and advance it to the patients skin. Fix the feeding tube within the retention plate and close the clamp to secure the feeding tube.

Laparotomy technique with splitting cannula: Diagrammatic version

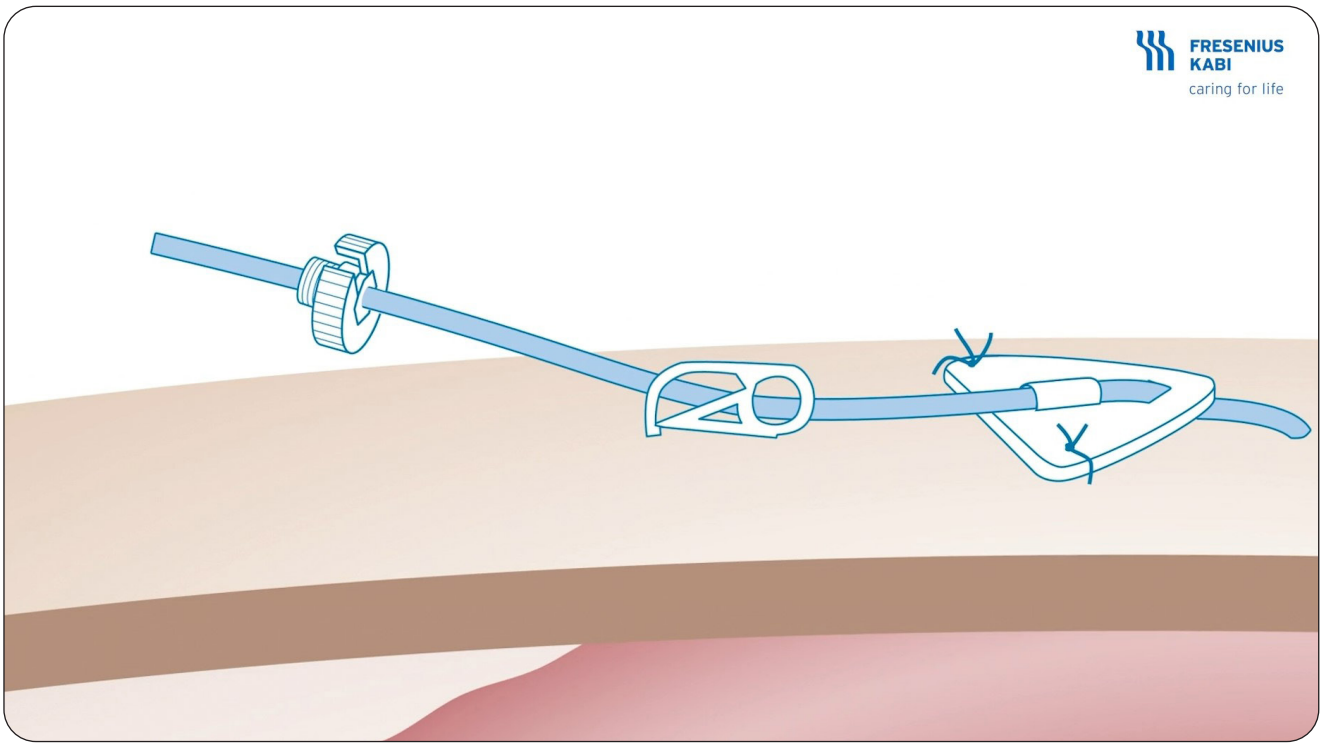


Secure the position of the feeding tube by tacking the fixing plate to the abdominal wall about 1-2 cm from the entry point.

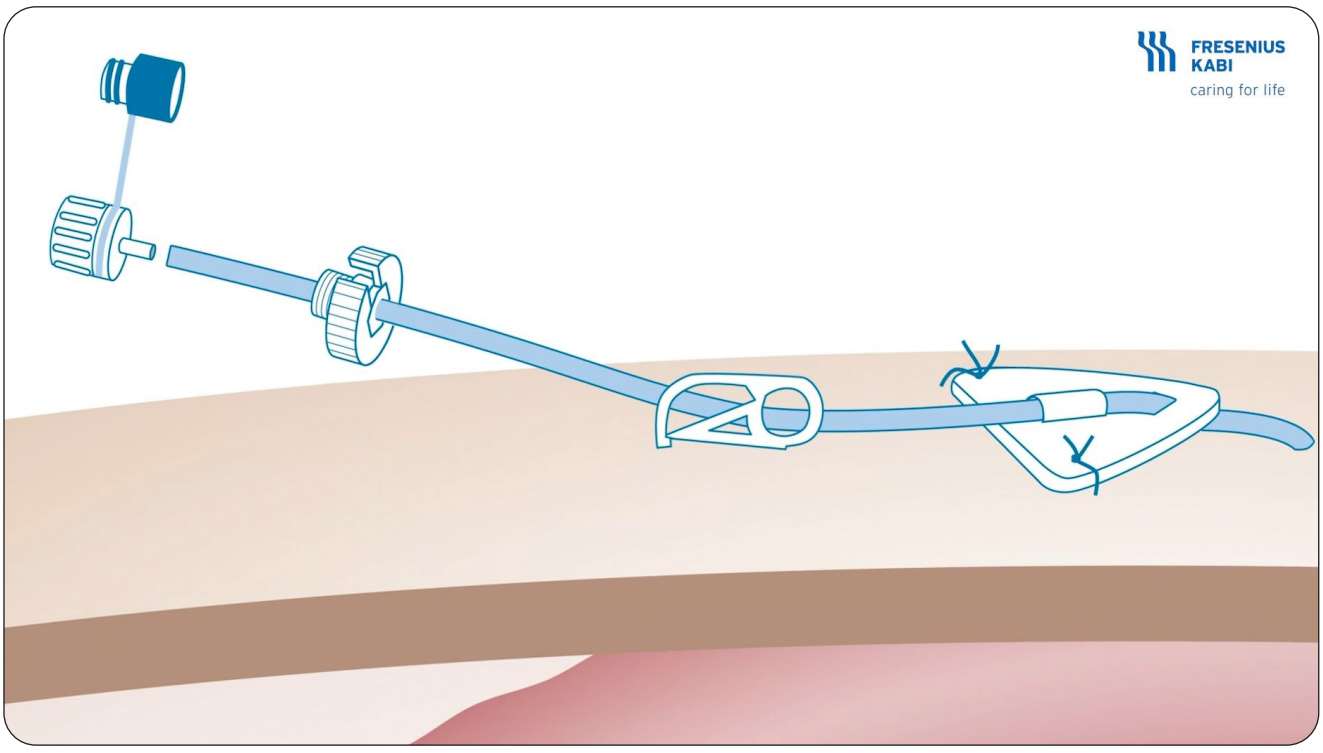


Attach the tube clamp by sliding over the end of the feeding tube.

Laparotomy technique with splitting cannula: Diagrammatic version

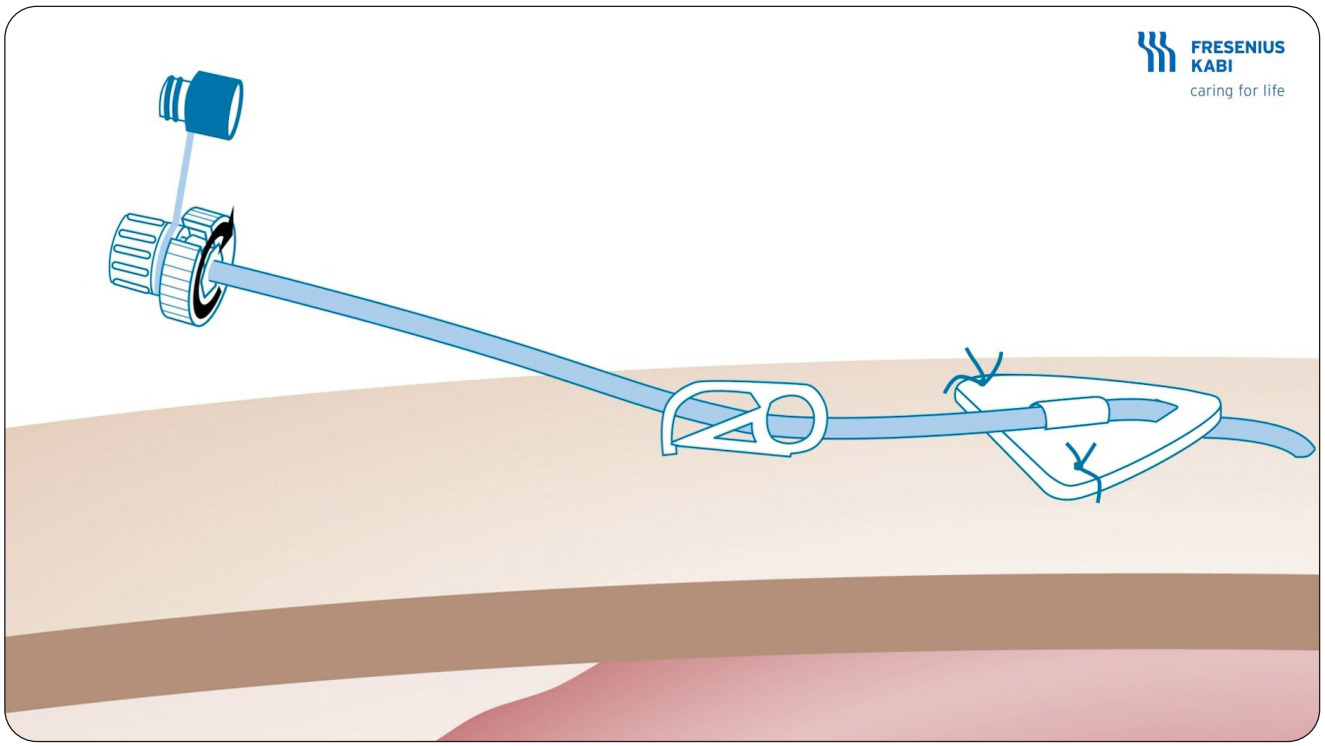


Push the fixing screw over the end of the feeding tube.



Push the metal pin of the ENFit connection as far as possible into the tube.

Laparotomy technique with splitting cannula: Diagrammatic version

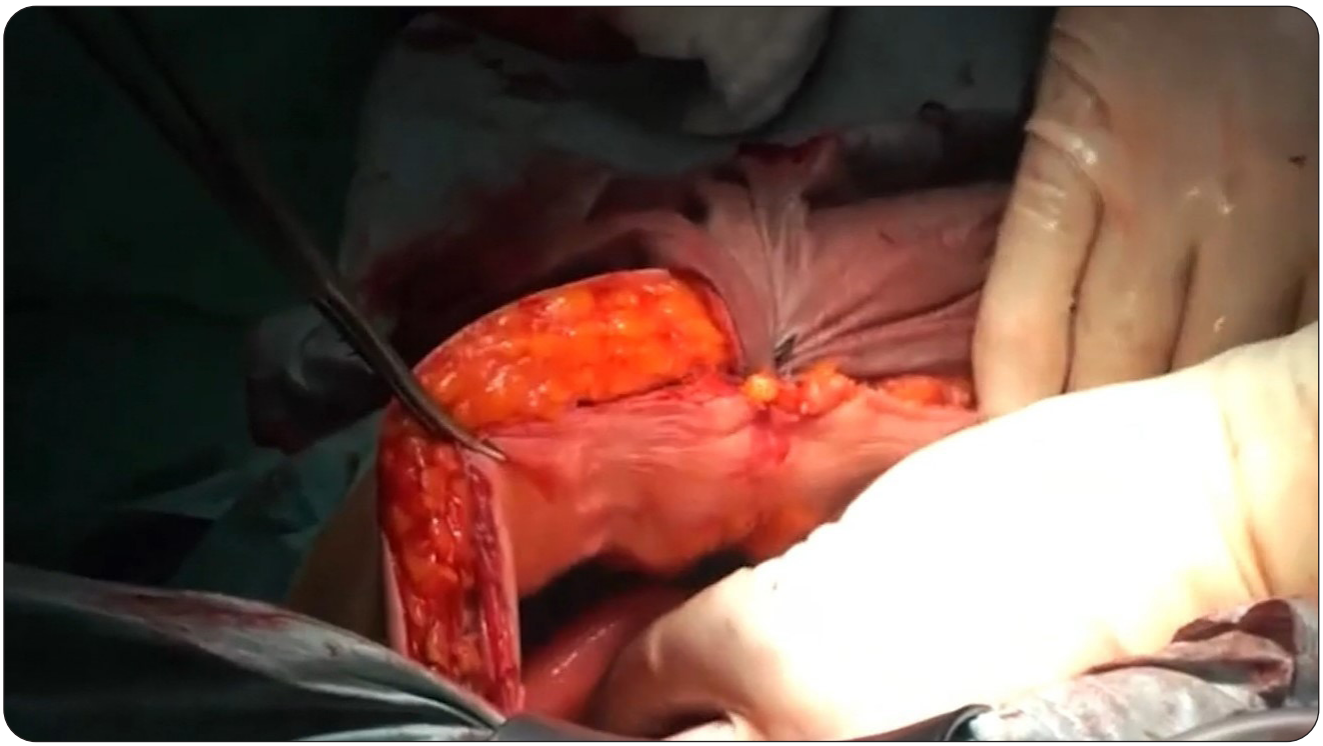


Secure the ENFit connection with the fixing screw and remove the screw aid clip.

While it has been the objective of Fresenius Kabi to develop accurate, easy-to-follow insertion suggestions, each healthcare professional inserting the enteral product must evaluate the appropriateness of the following technique based on his or her medical training, experience and patient evaluation.

Surgical technique

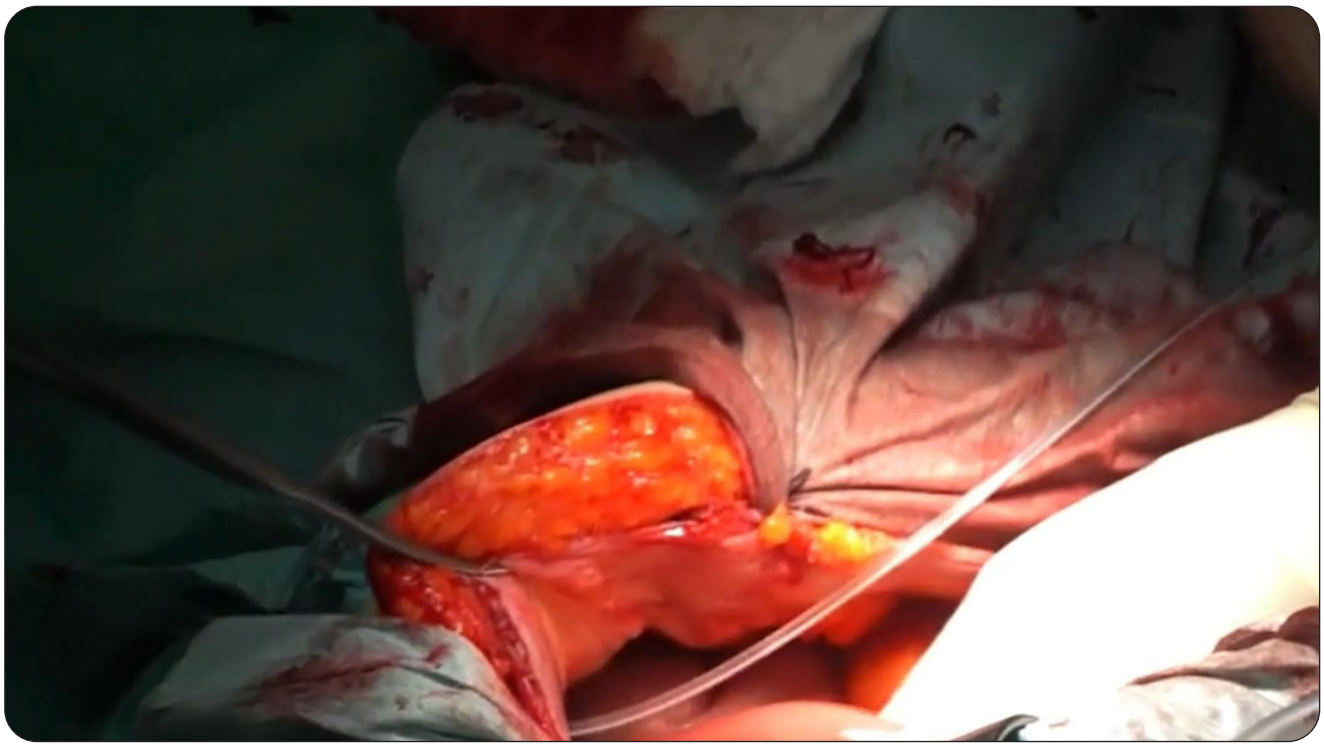
Laparotomy technique with splitting cannula: Photographic version



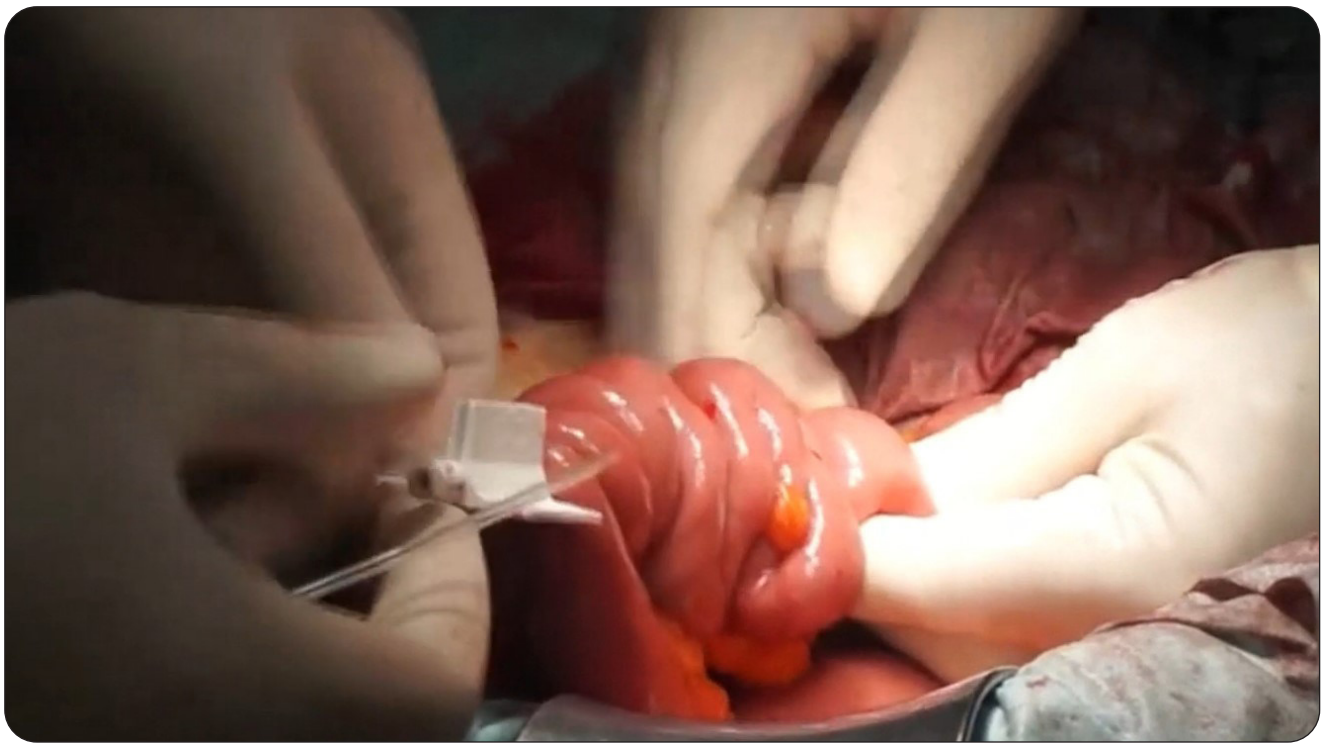
A duodenal loop to be freely mobilised is selected.

Puncture the abdominal wall diagonally with the blue cannula from cranial to caudal.

Laparotomy technique with splitting cannula: Photographic version

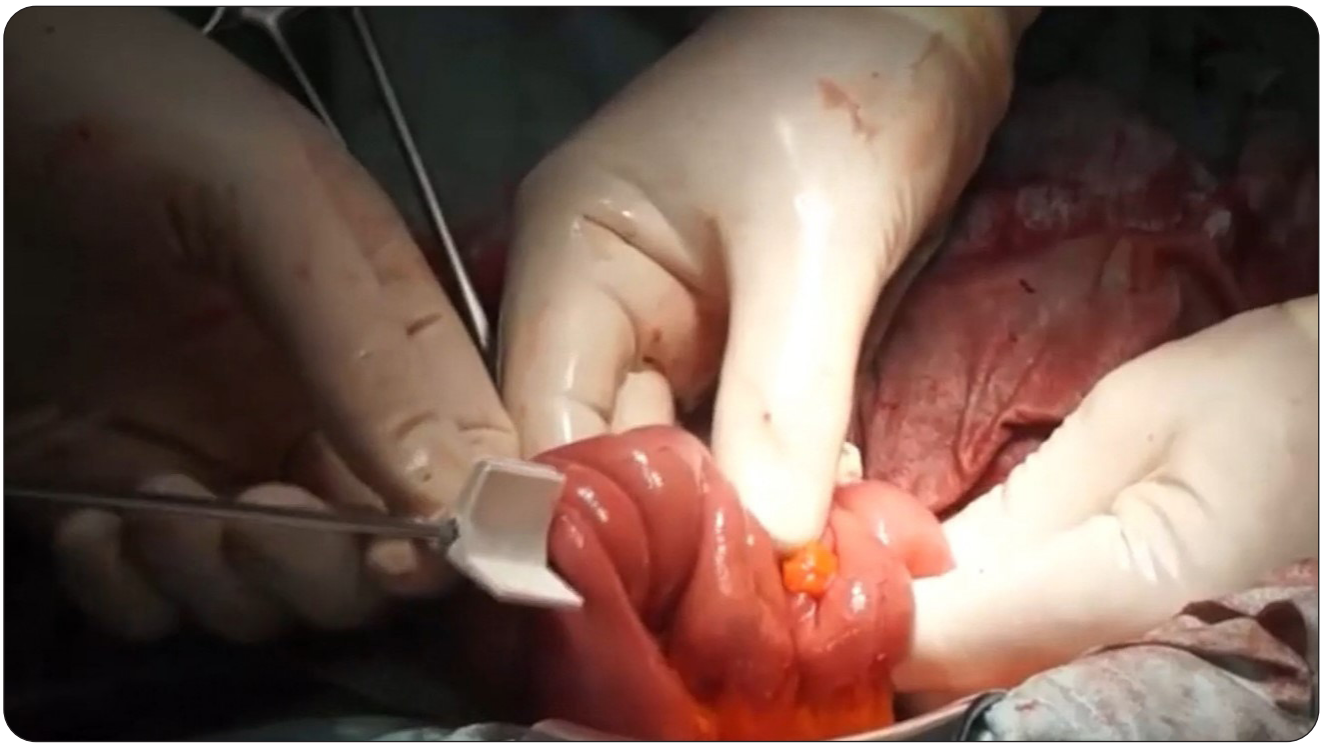


The feeding tube is guided into the gastric cavity from the outside inwards through the split cannula.



Puncture antimesenteric transmural of the intestine beyond the ligament of Treitz. The mandrin is fully advanced again into the cannula and the cannula advanced approx. 20-30 cm.

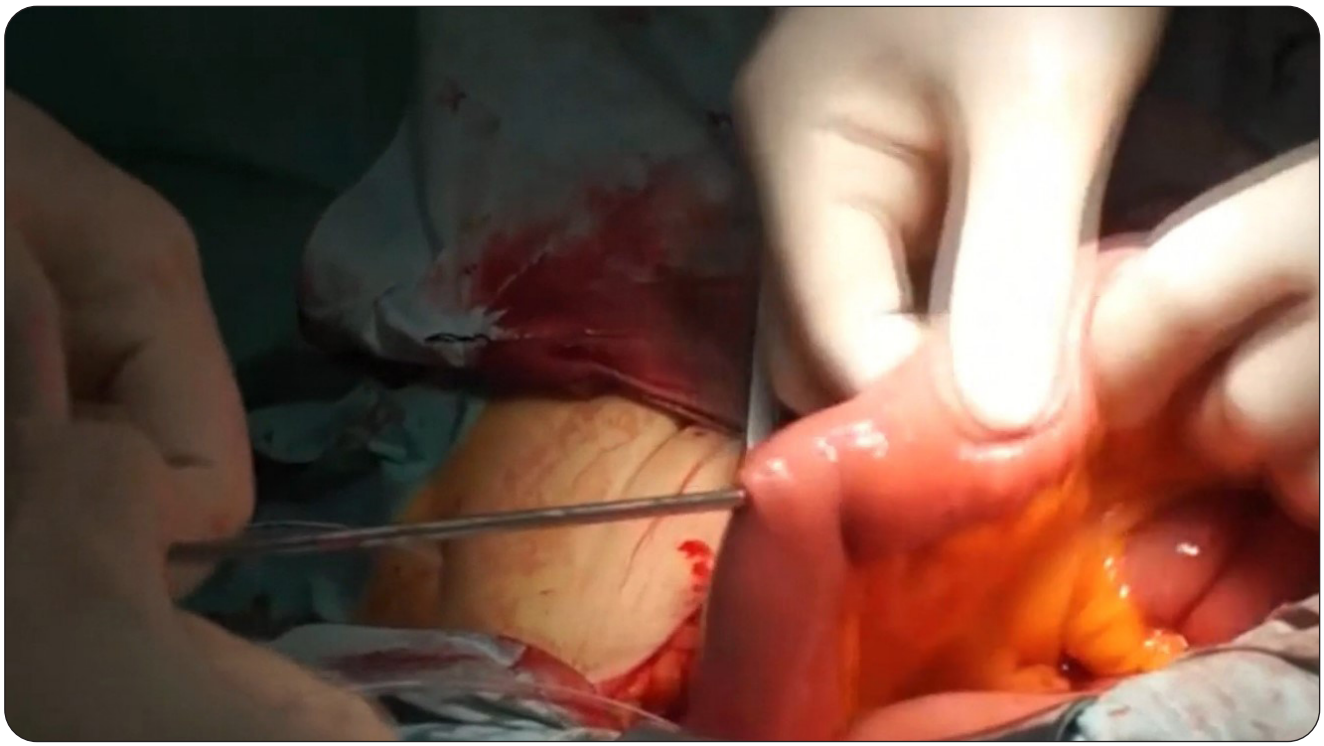
Laparotomy technique with splitting cannula: Photographic version



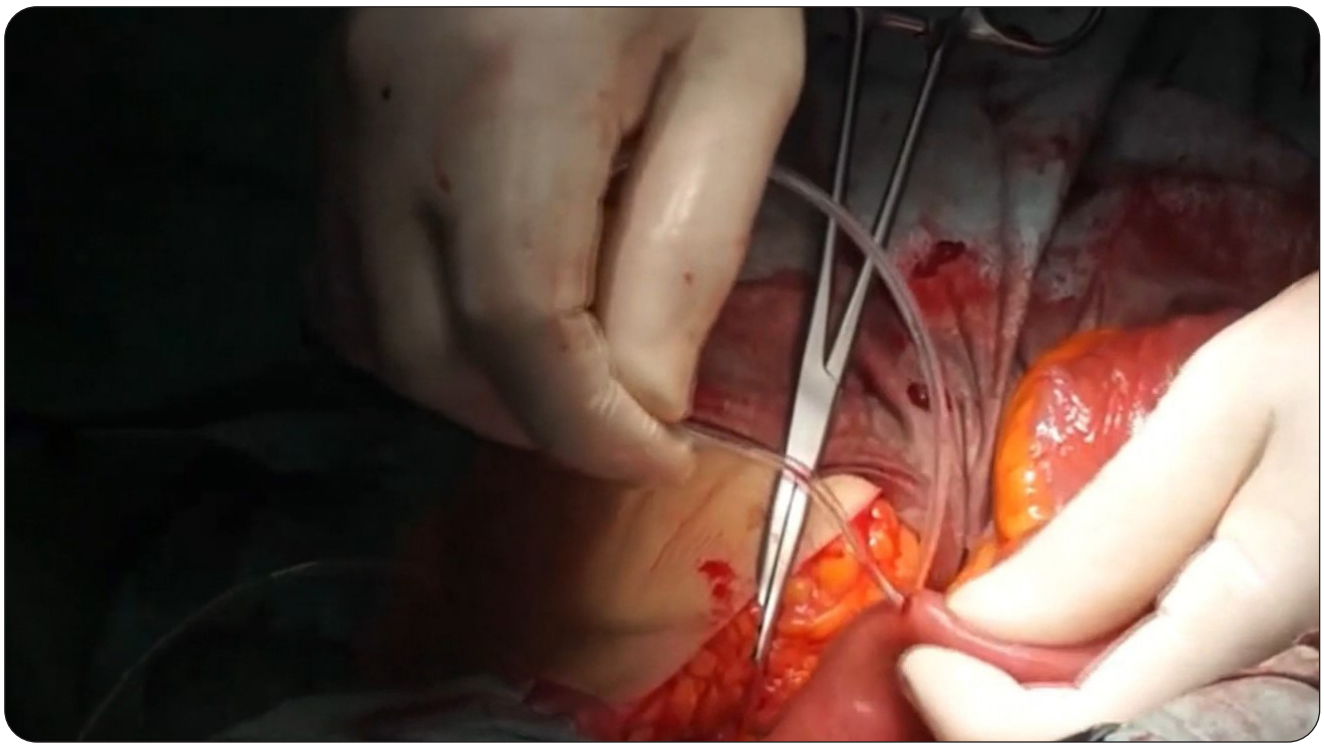
Remove the mandrin from the cannula.

Advance the feeding tube forwards through the cannula into the lumen of the intestine with digital control.

Laparotomy technique with splitting cannula: Photographic version

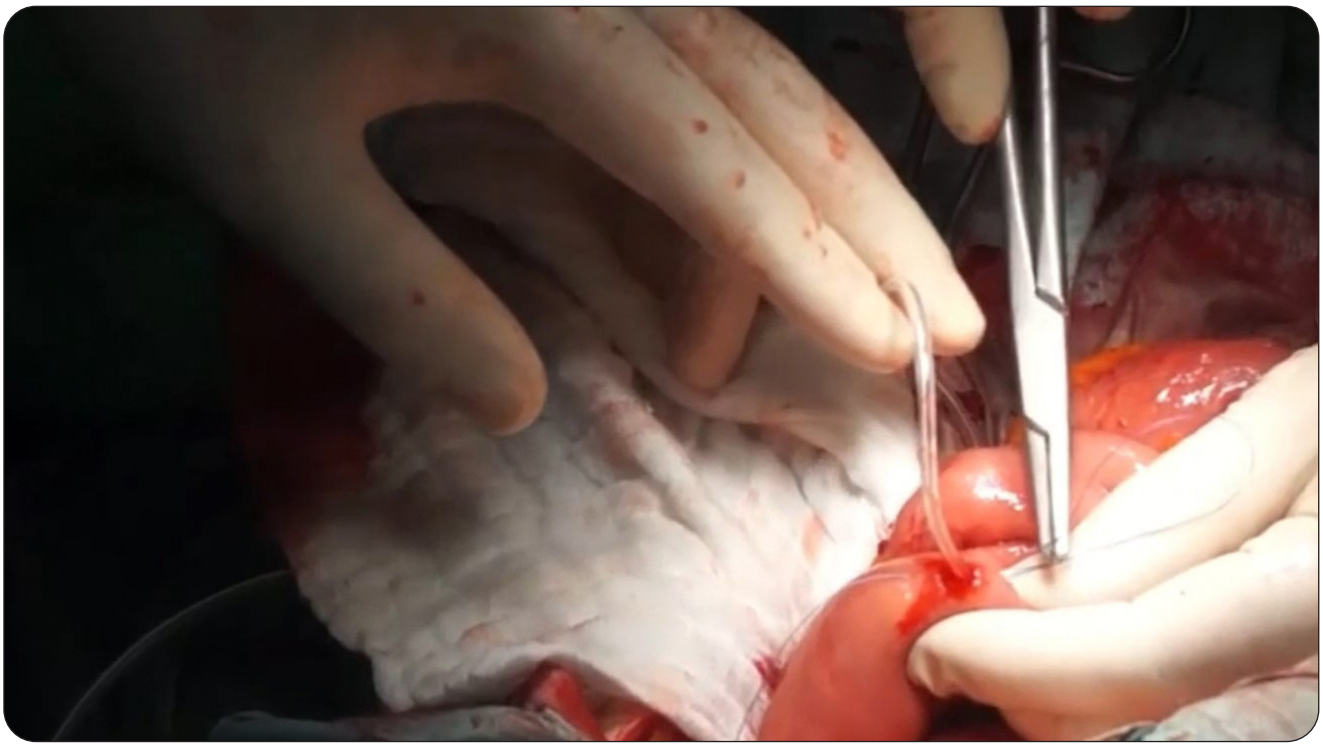


Withdraw the cannula over the tube and remove after splitting.

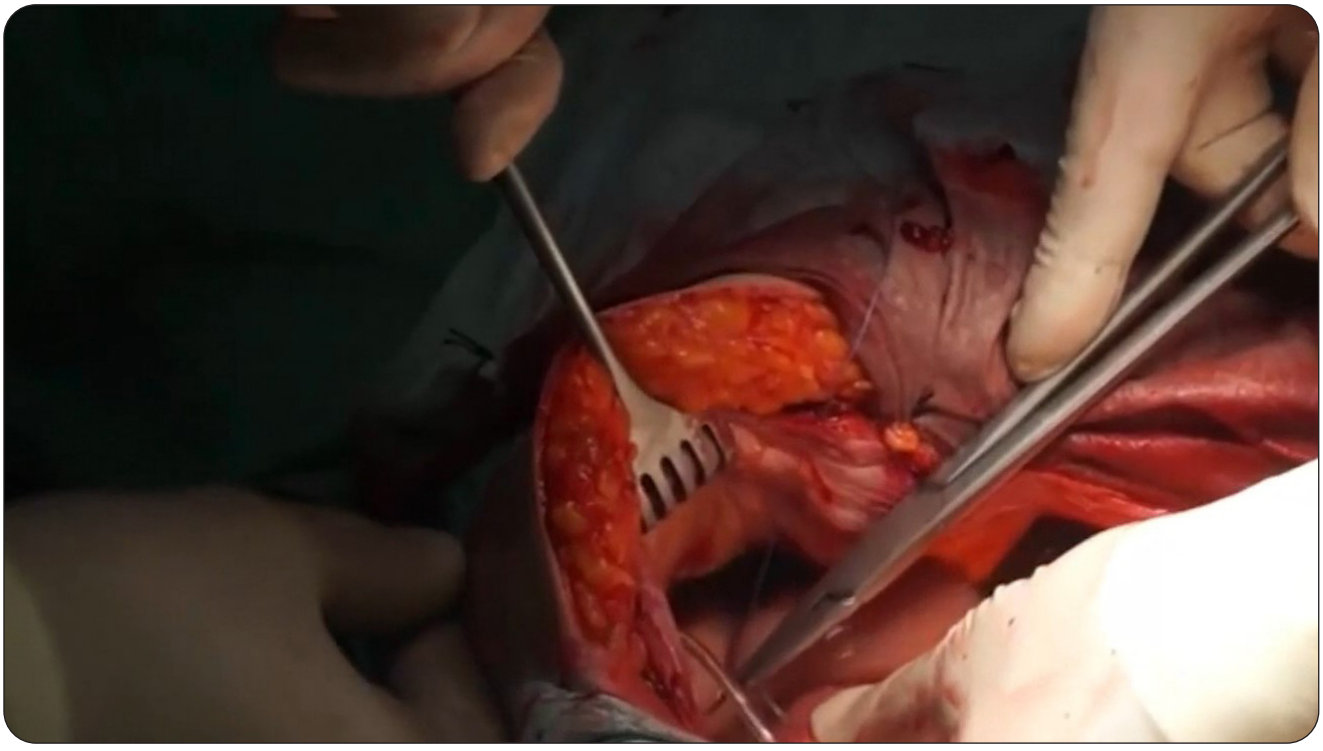


Advance the feeding tube further into the intestine as required.

Laparotomy technique with splitting cannula: Photographic version

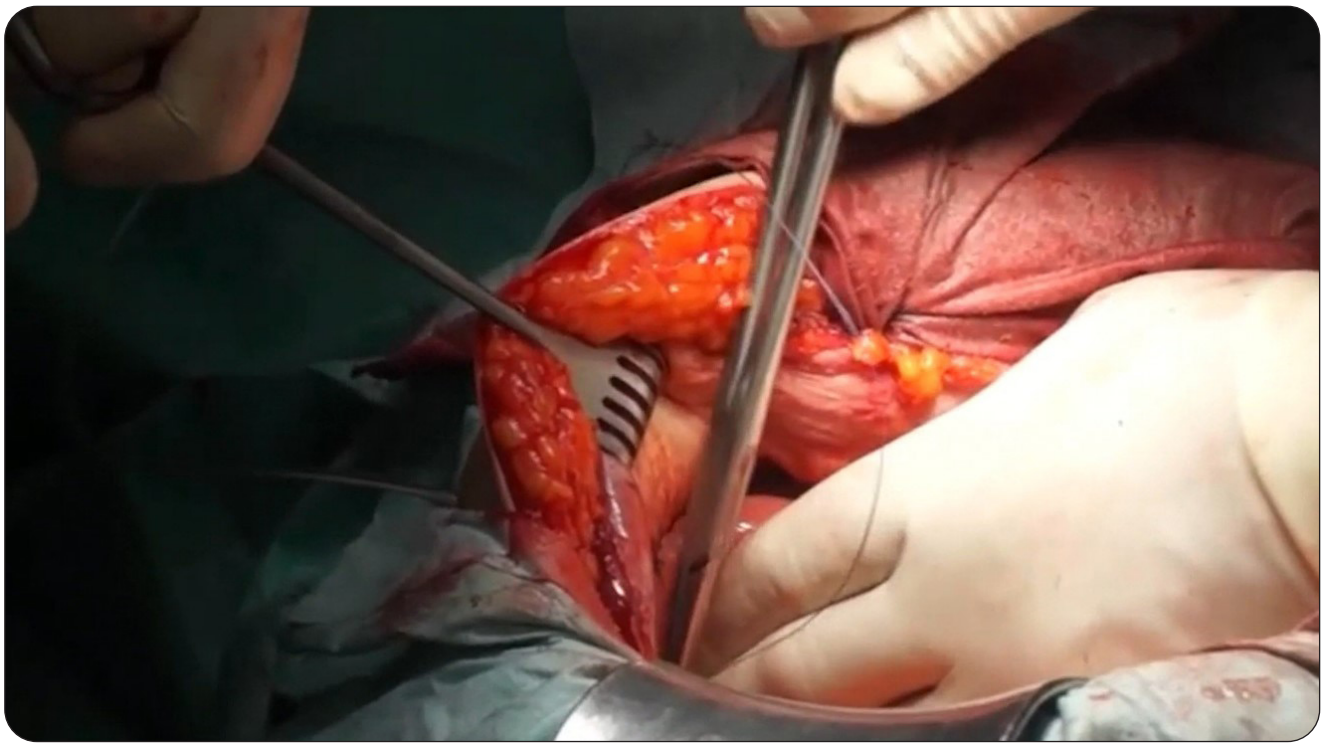


Insert dissolvable purse-string sutures, which are first knotted around the puncture point as invaginated sutures and which serve as a temporary fastening at the parietal peritoneum.

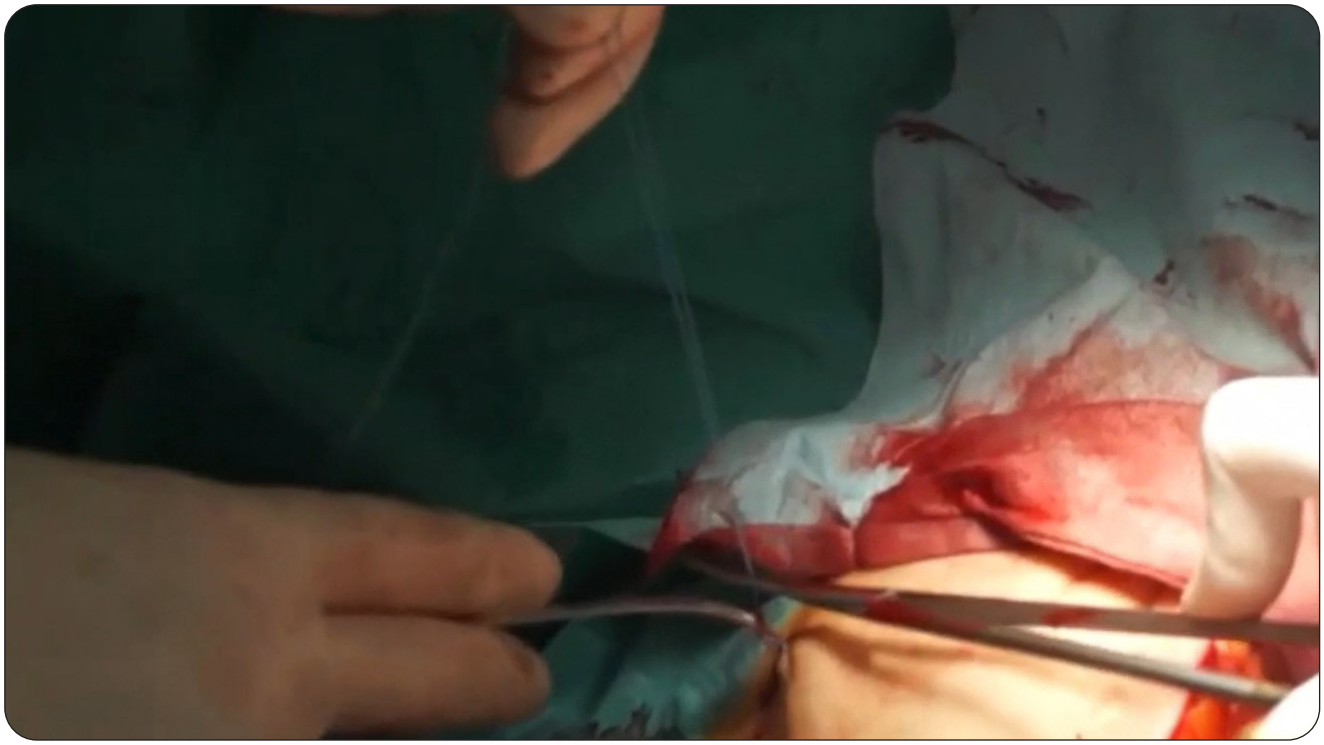


Attach the intestinal loop to the parietal peritoneum.

Laparotomy technique with splitting cannula: Photographic version



The intestine should also be sutured to the peritoneum a few cm's above and below the point of entry to prevent dislocation due to rotation.



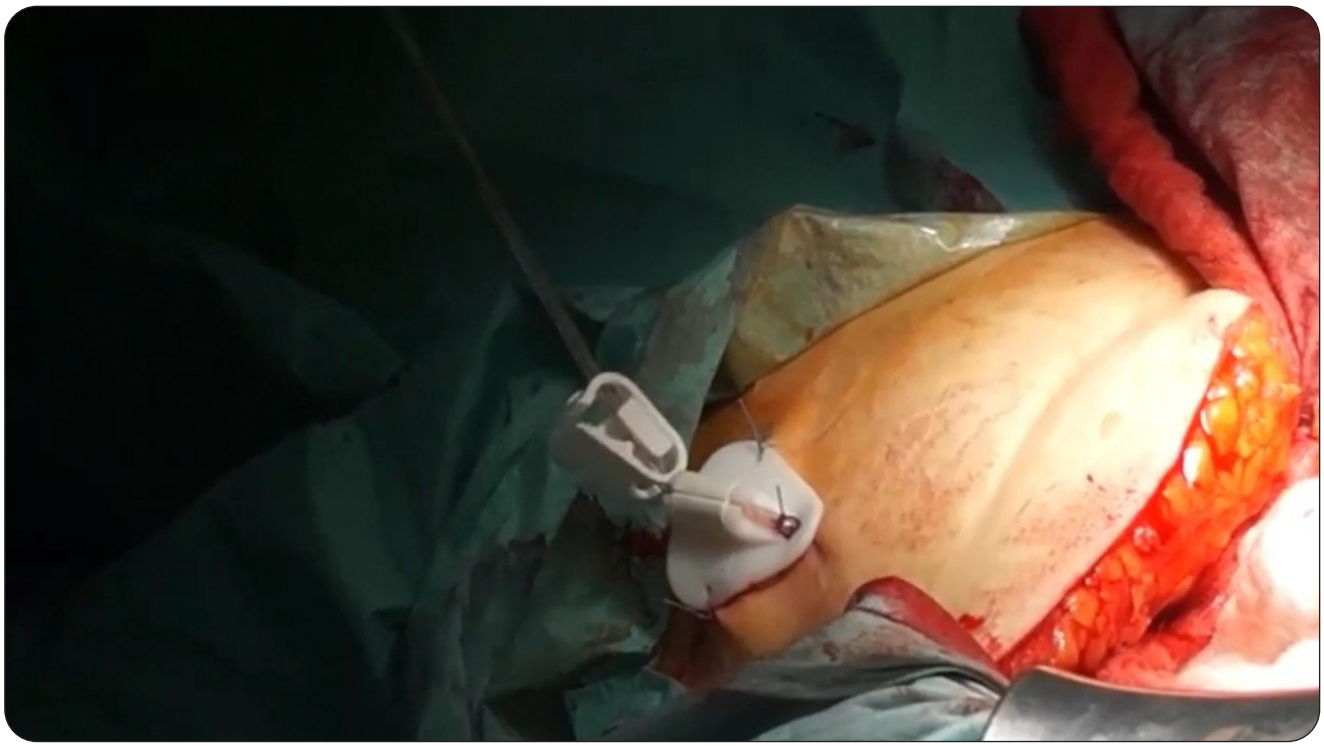
The external point of entry of the feeding tube is closed and the feeding tube secured in place with sutures.

Laparotomy technique with splitting cannula: Photographic version

Insert the fixation plate over the end of the feeding tube and advance it to the patients skin. Fix the feeding tube within the retention plate and close the clamp to secure the feeding tube.

Secure the position of the feeding tube by tacking the fixing plate to the abdominal wall about 1 - 2 cm's from the entry point.

Laparotomy technique with splitting cannula: Photographic version



Attach the tube clamp by sliding over the end of the feeding tube.

Push the fixing screw over the end of the feeding tube. Push the metal pin of the ENFit connection as far as possible into the tube.

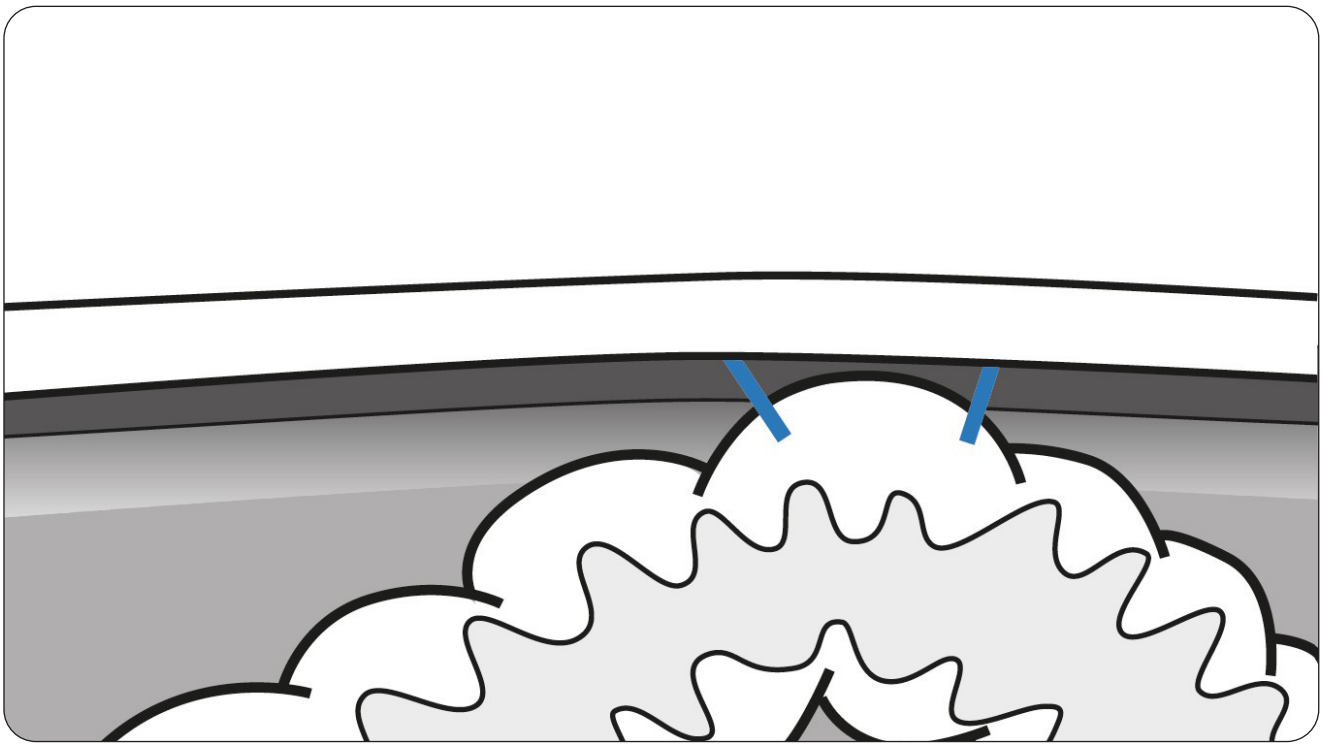
Laparotomy technique with splitting cannula: Photographic version

Secure the ENFit connection with the fixing screw and remove the screw aid clip.

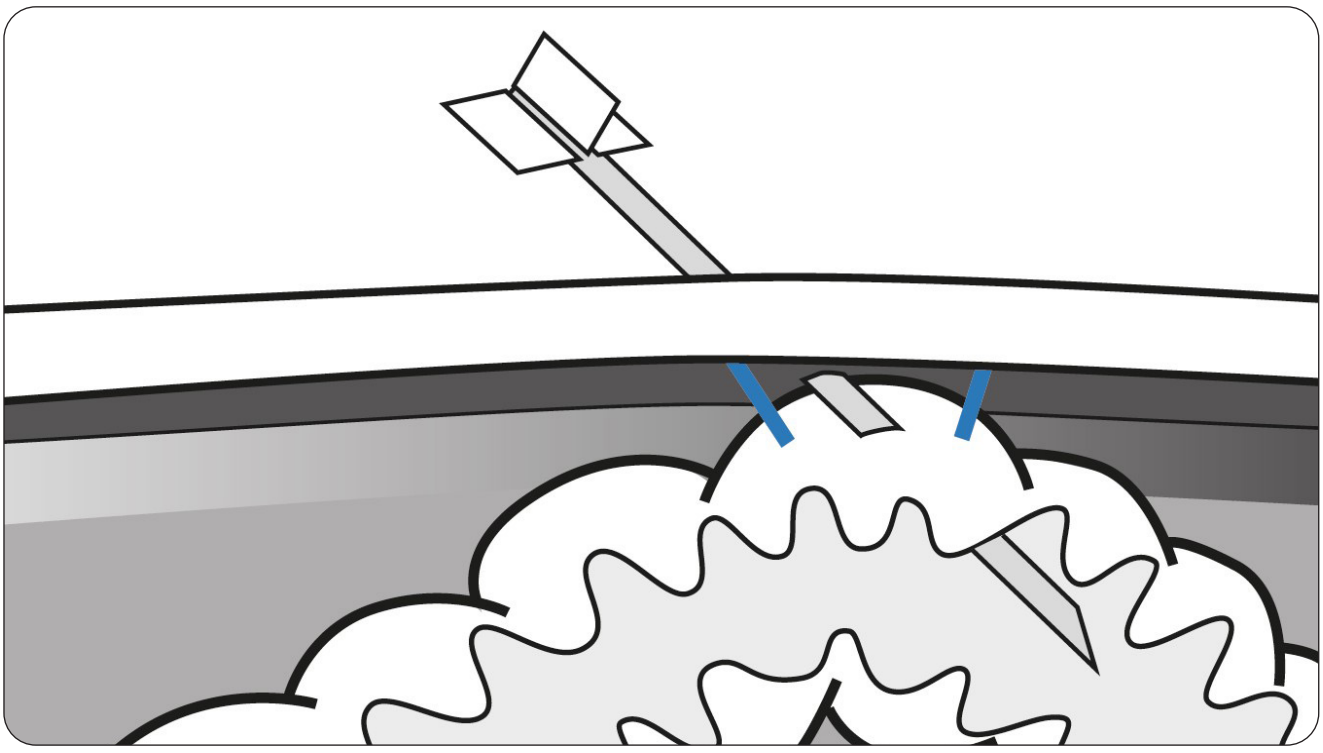
While it has been the objective of Fresenius Kabi to develop accurate, easy-to-follow insertion suggestions, each healthcare professional inserting the enteral product must evaluate the appropriateness of the following technique based on his or her medical training, experience and patient evaluation.

Surgical technique

Laparoscopy technique with cannula (long): Diagrammatic version

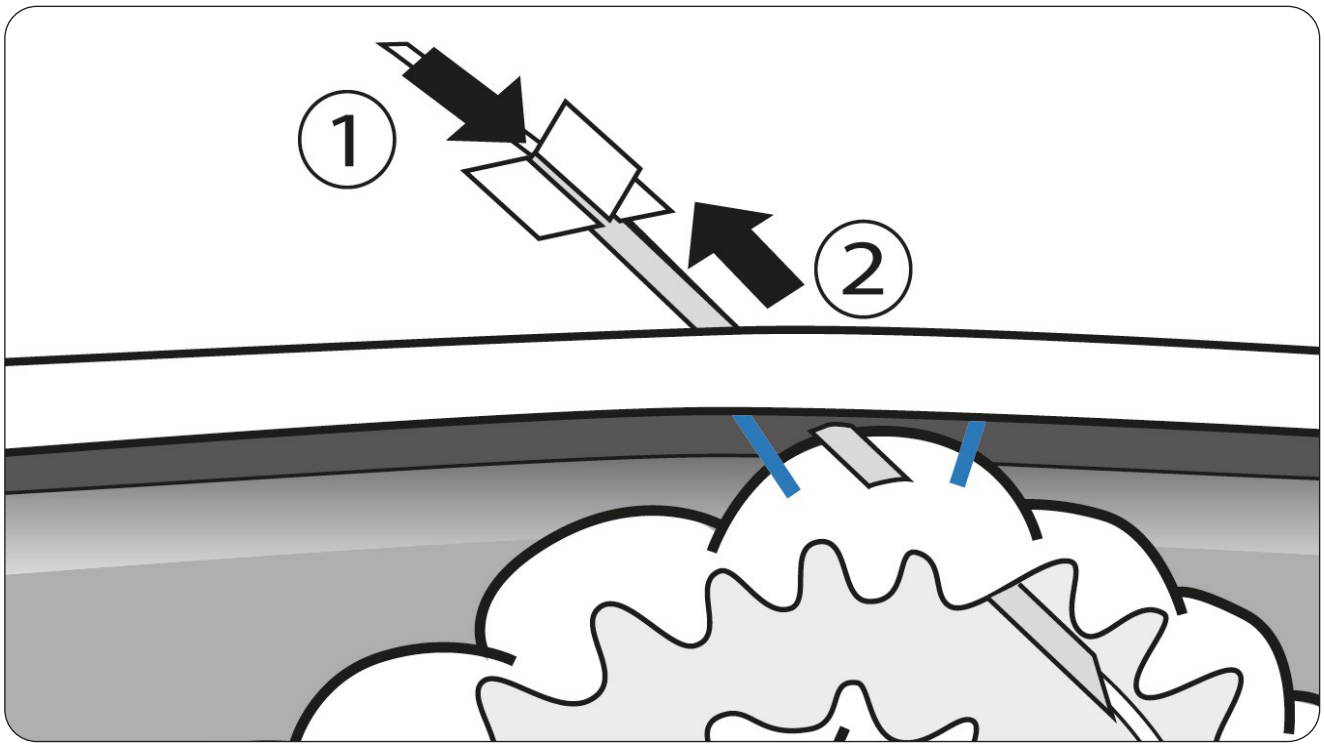


Fix the intestinal loop to the abdominal wall at two places

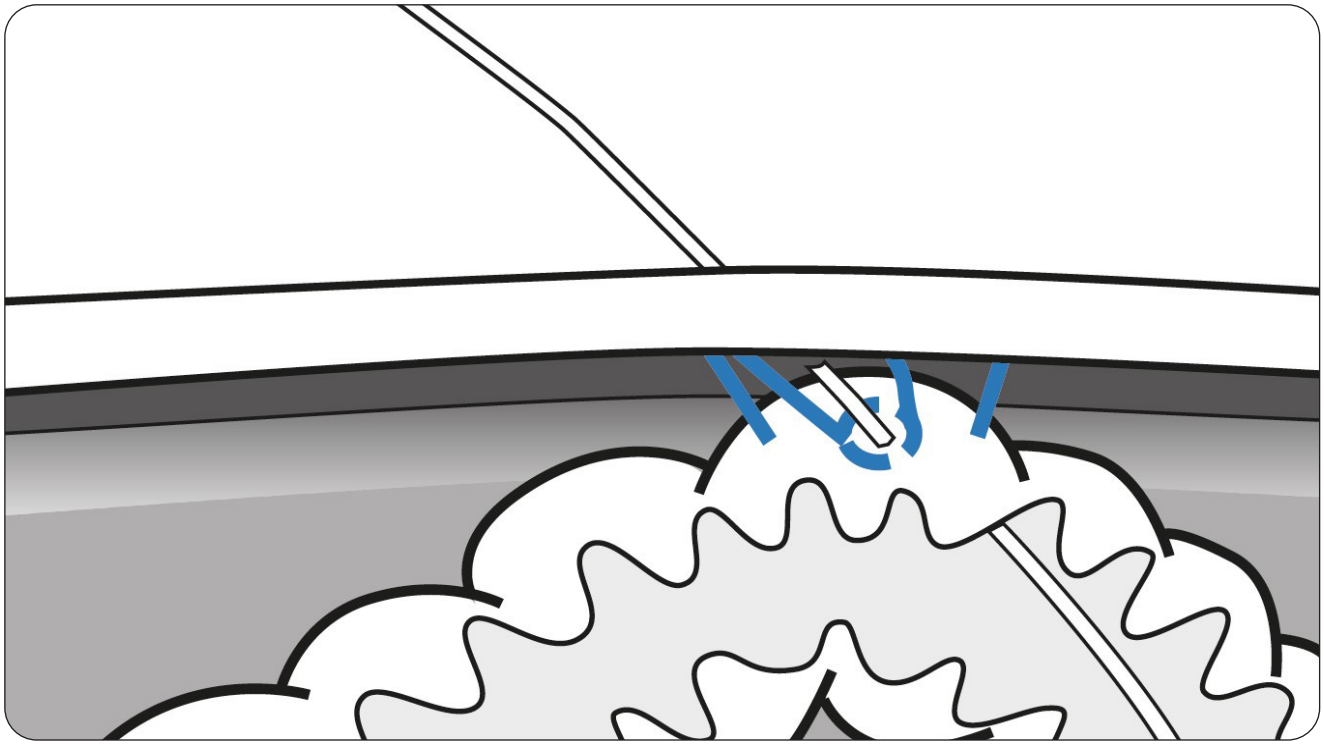


Puncture the abdominal wall with the longer (white) cannula then puncture the intestine.

Laparoscopy technique with cannula (long): Diagrammatic version

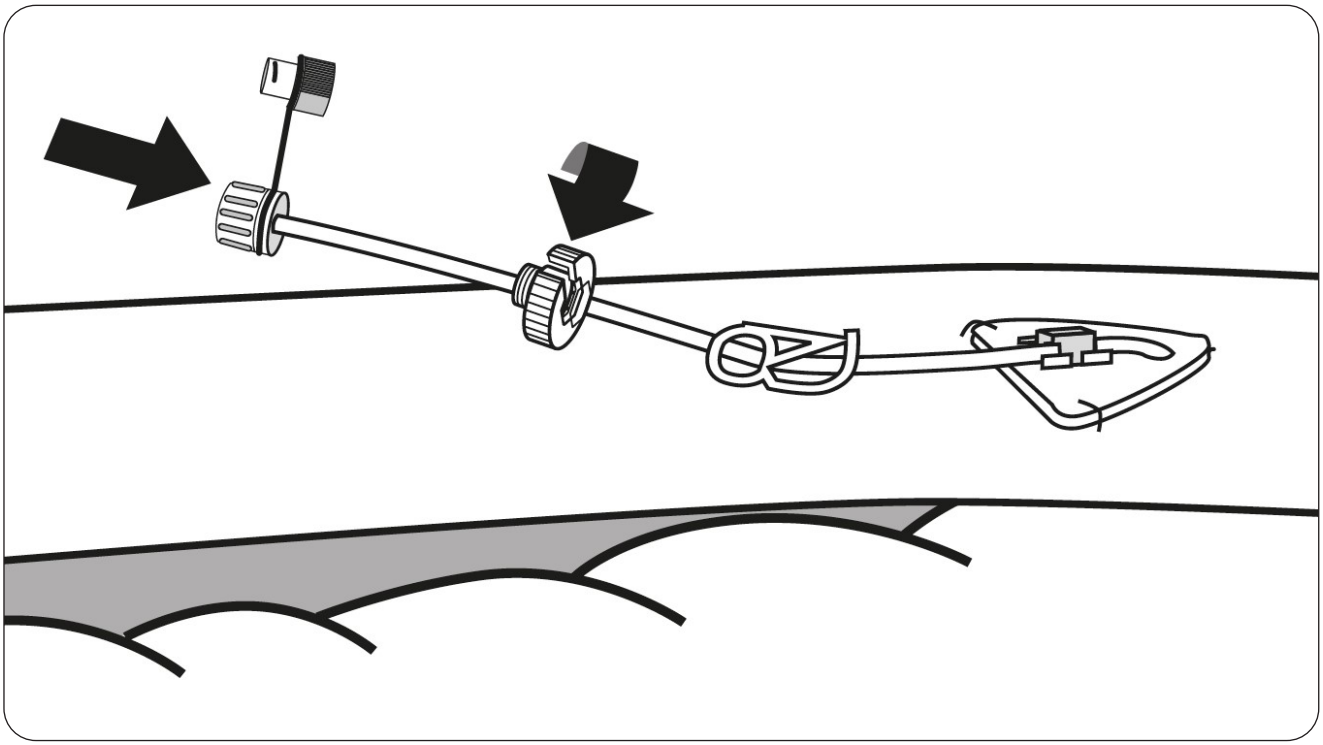


Push the feeding tube forward through the cannula approximately 30 cm then withdraw the split cannula over the feeding tube.



Attach the intestinal loop to the abdominal wall with dissolvable purse-string sutures until the tube is no longer visible.

Laparoscopy technique with cannula (long): Diagrammatic version



Insert the fixation plate over the end of the feeding tube and advance it to the patients skin. Fix the feeding tube within the retention plate and close the clamp to secure the feeding tube.

Secure the position of the feeding tube by tacking the fixing plate to the abdominal wall about 1-2 cm from the entry point.

Attach the tube clamp by sliding over the end of the feeding tube.

Push the fixing screw over the end of the feeding tube.

Push the metal pin of the ENFit connection as far as possible into the tube.

Secure the ENFit connection with the fixing screw and remove the screw aid clip.

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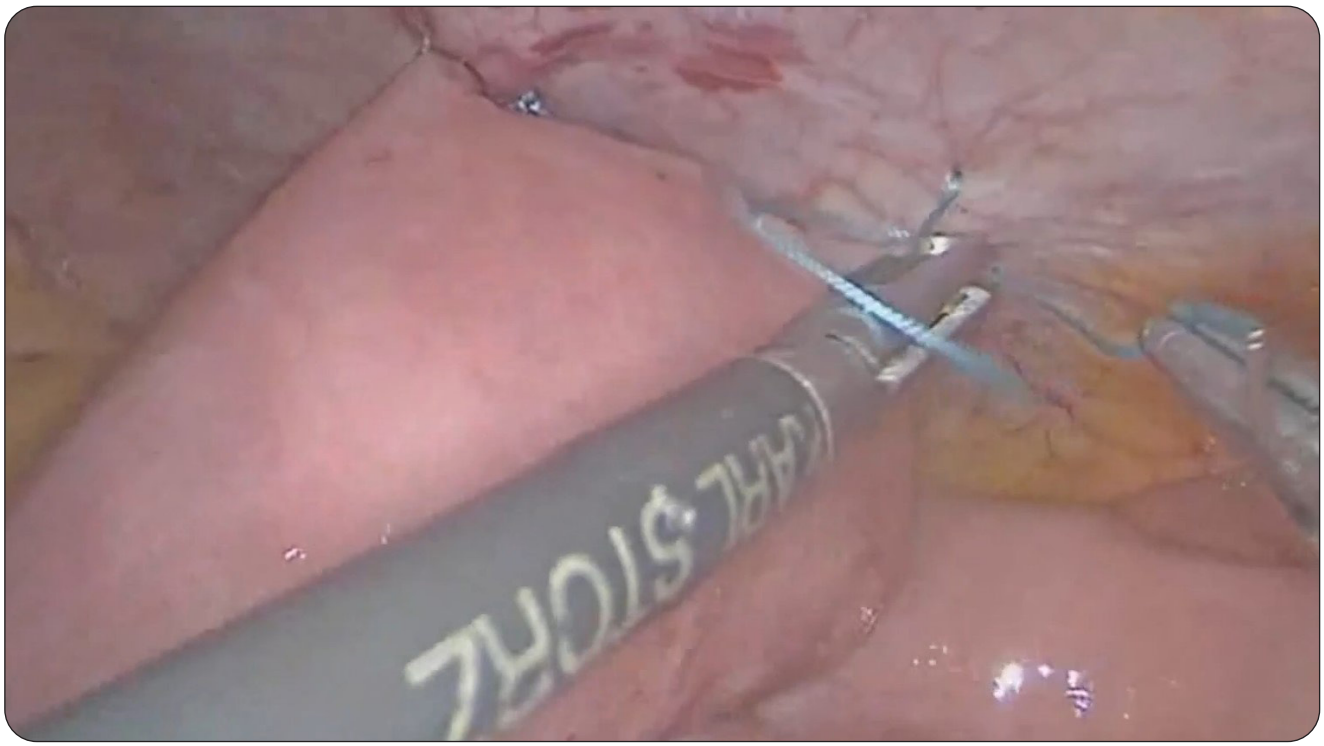
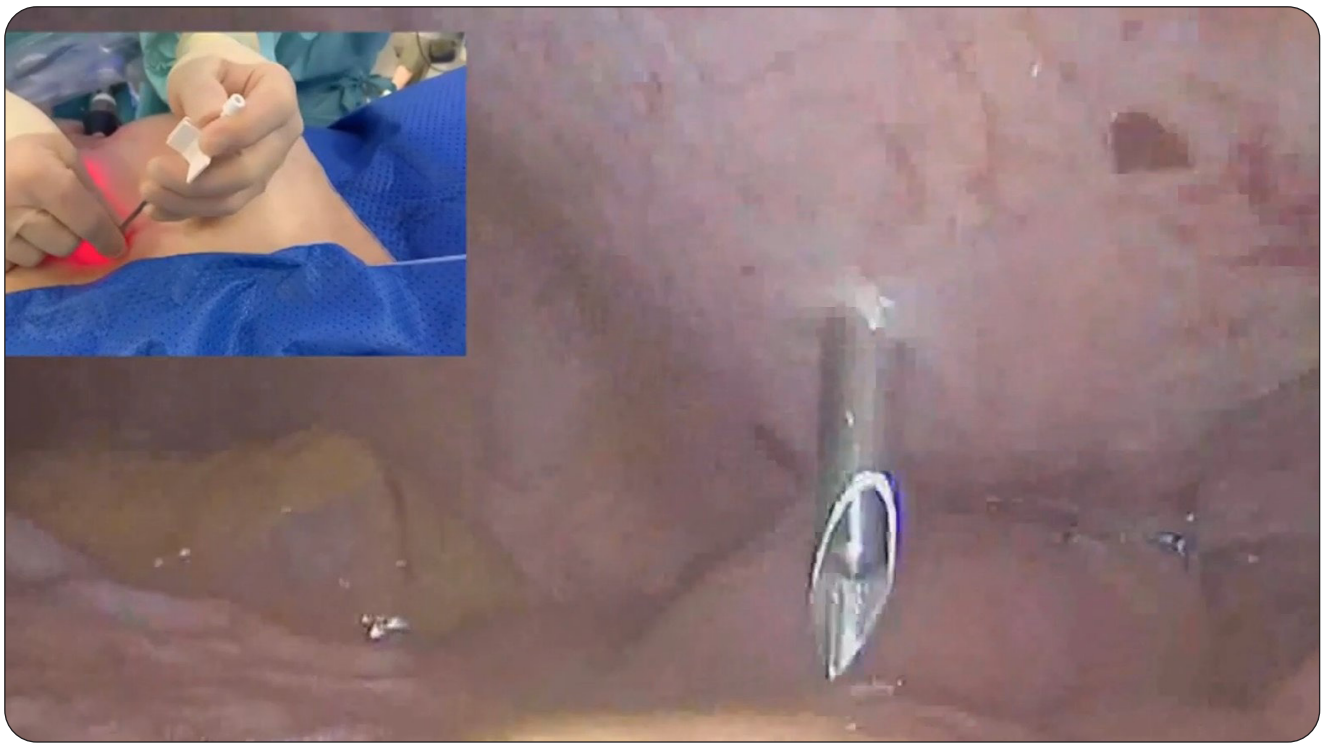
Laparoscopy technique with cannula (long): Photographic version

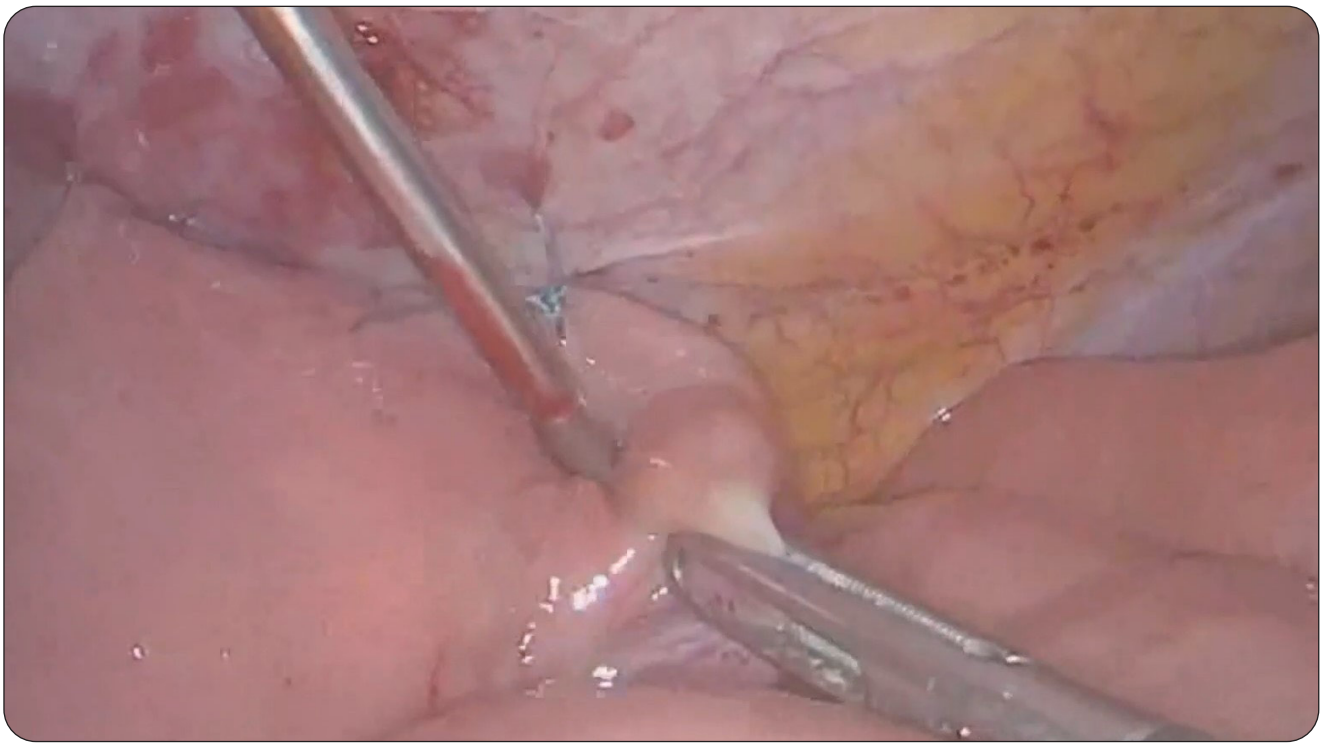


Fix the intestinal loop to the abdominal wall at two places.



Puncture the abdominal wall with the longer (white) cannula.

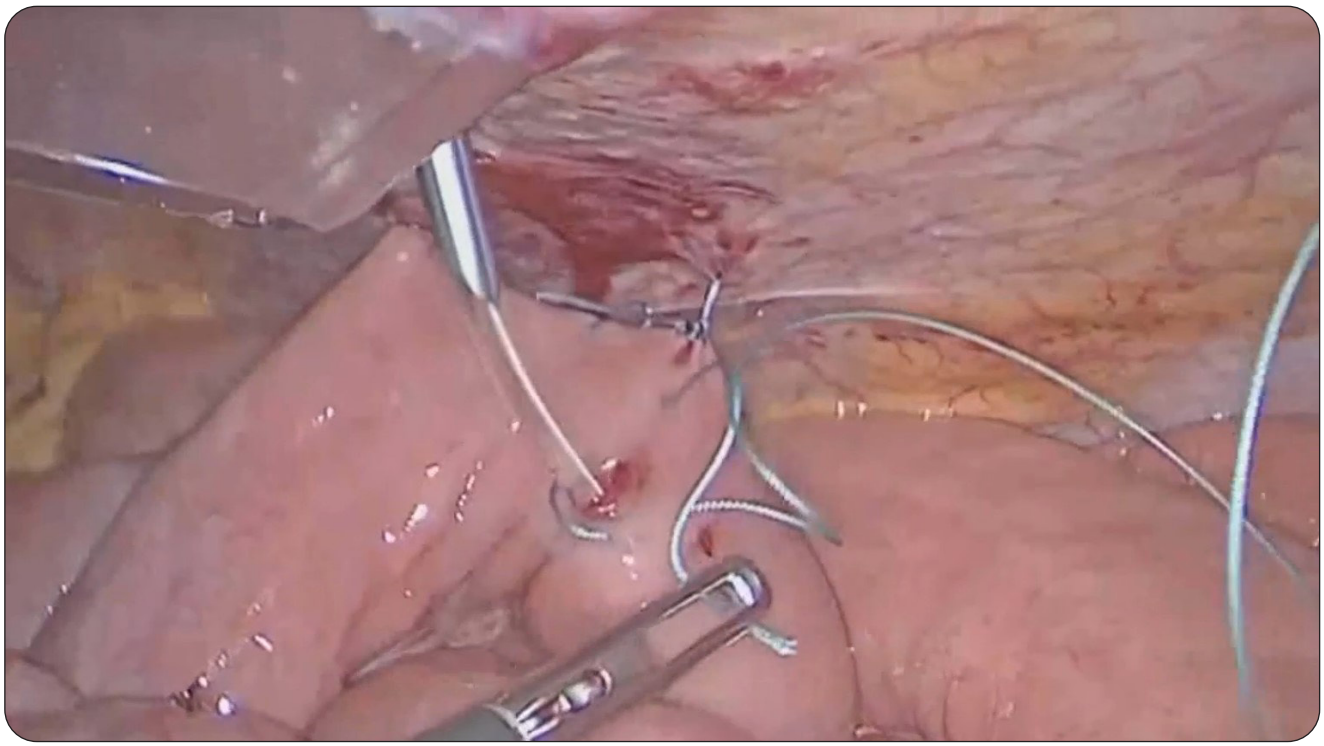
Laparoscopy technique with cannula (long): Photographic version



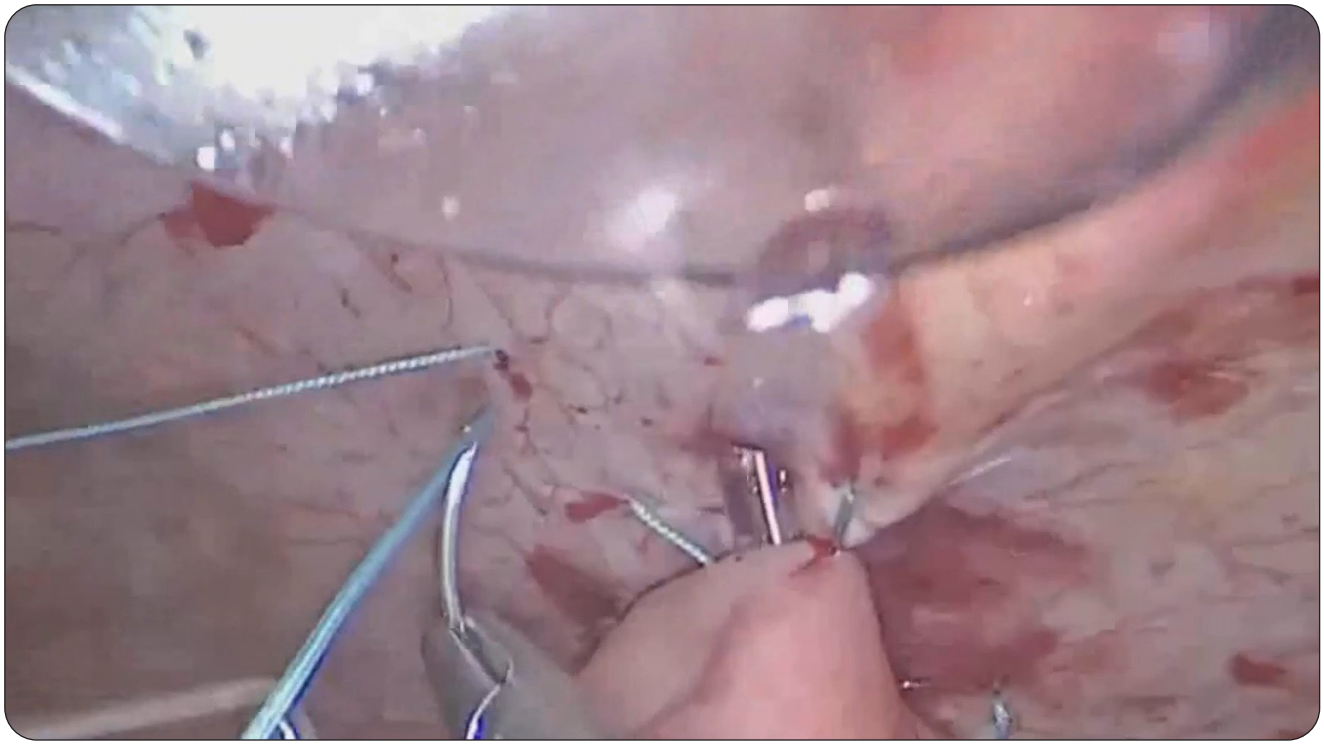
Puncture the intestine with the white cannula.

Push the feeding tube forward through the cannula approximately 30 cm.

Laparoscopy technique with cannula (long): Photographic version

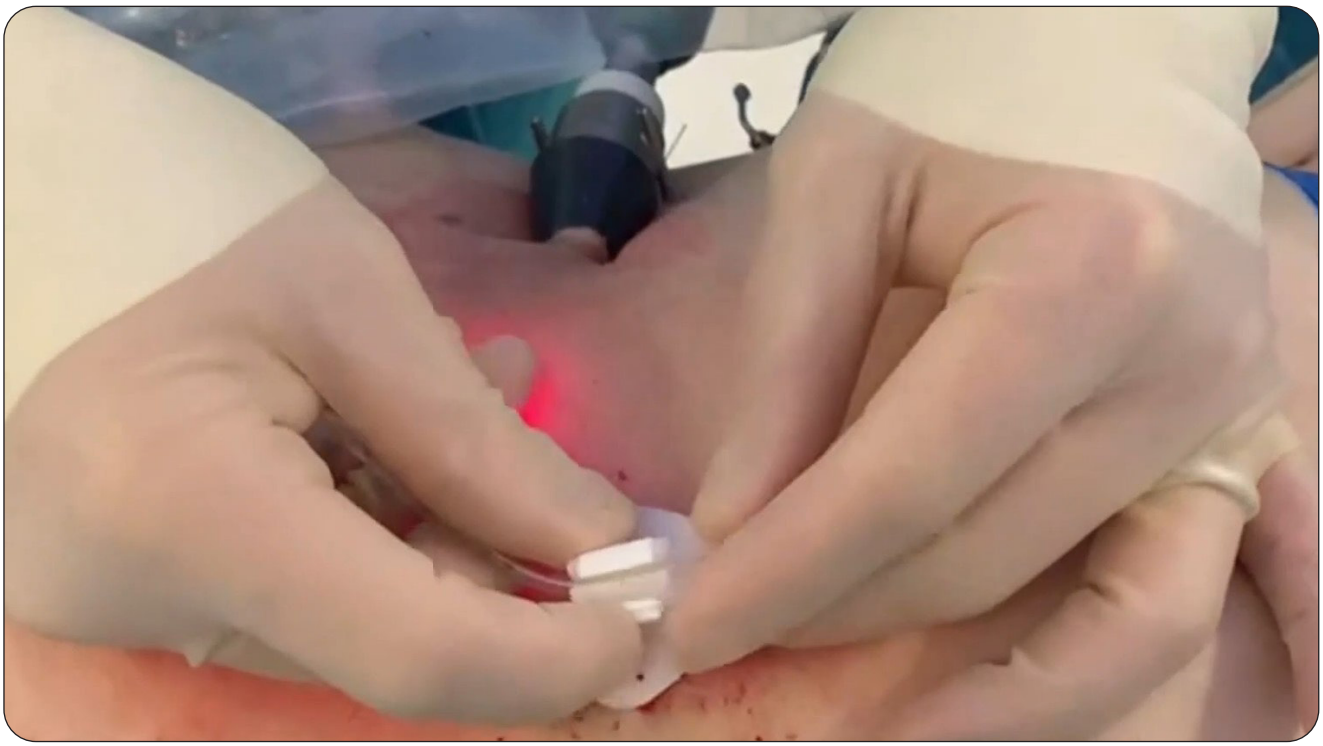


Withdraw the cannula over the tube and remove after splitting.

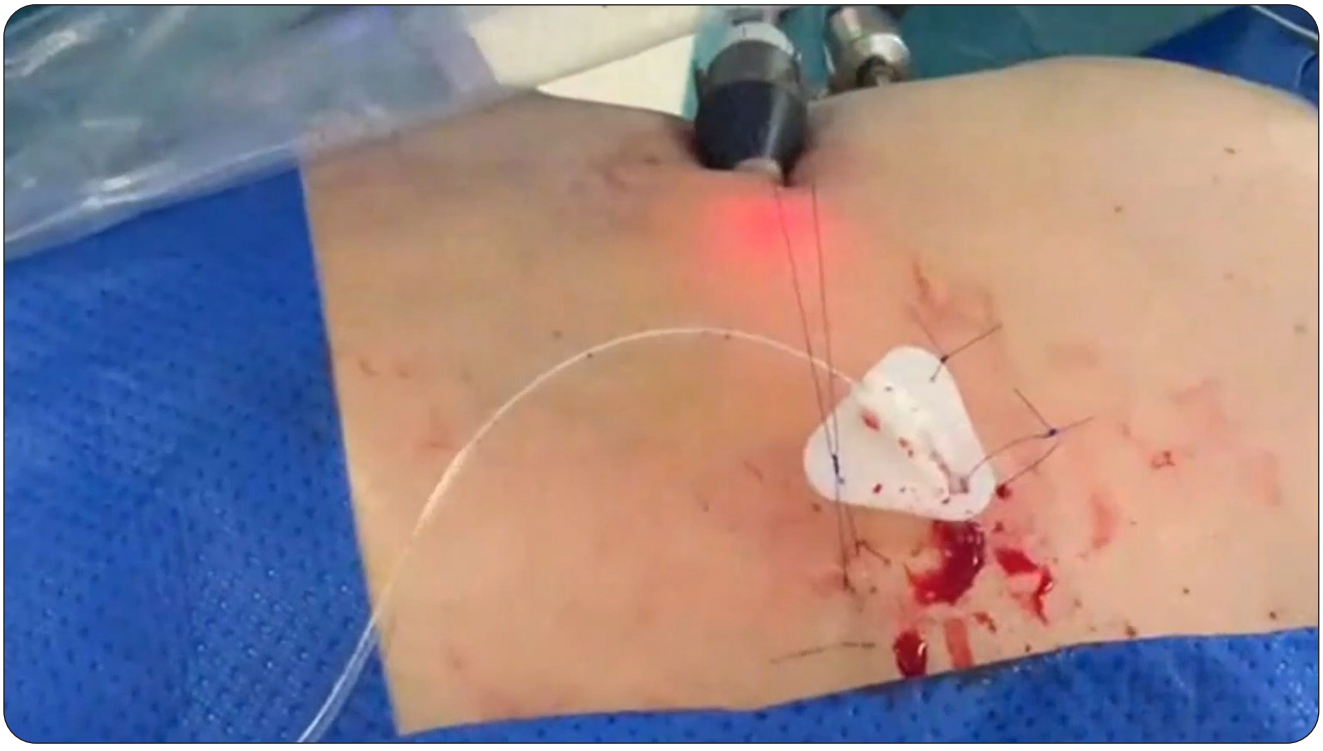


Attach the intestinal loop to the parietal peritoneum. The intestine should also be sutured to the peritoneum a few cm's above and below the point of entry to prevent dislocation due to rotation.

Laparoscopy technique with cannula (long): Photographic version



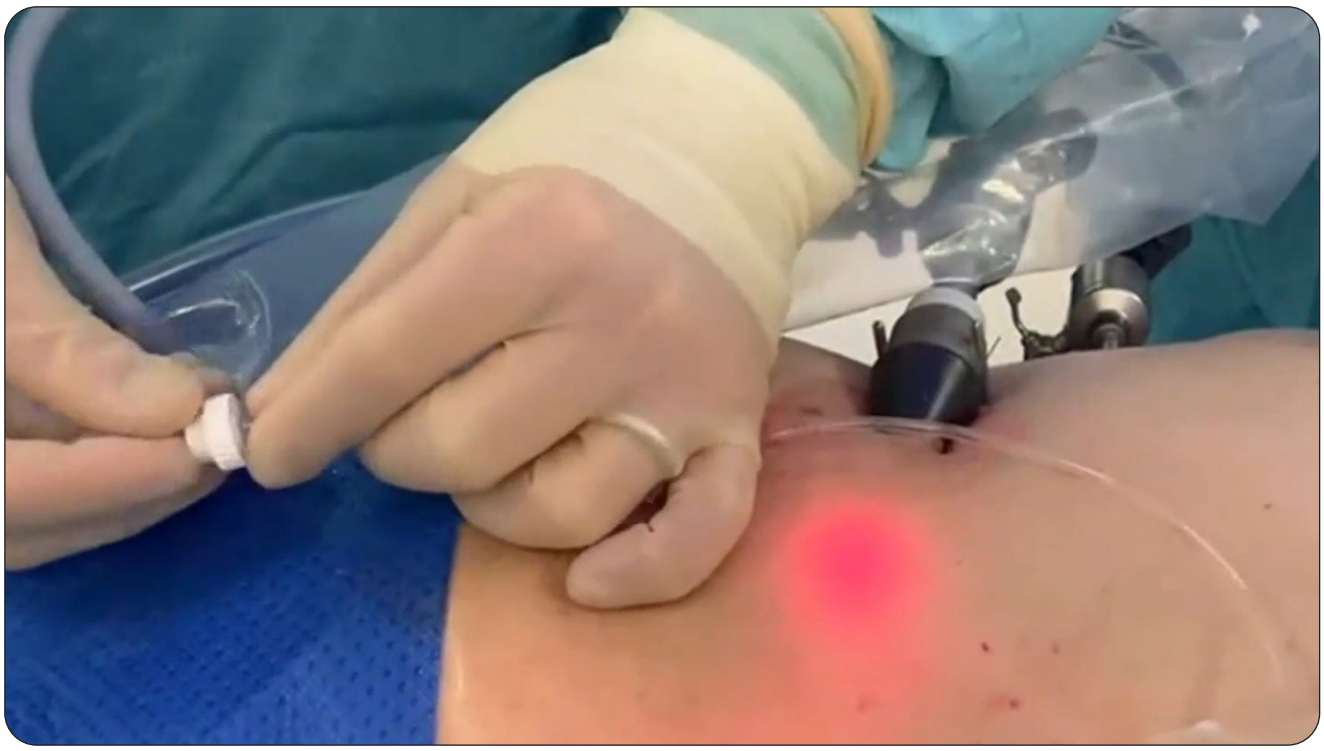
Insert the fixation plate over the end of the feeding tube and advance it to the patients skin. Fix the feeding tube within the retention plate and close the clamp to secure the feeding tube.



Secure the position of the feeding tube by tacking the fixing plate to the abdominal wall about 1 - 2 cm from the entry point.

Laparoscopy technique with cannula (long): Photographic version

Attach the tube clamp by sliding over the end of the feeding tube.



Push the fixing screw over the end of the feeding tube.

Laparoscopy technique with cannula (long): Photographic version

Push the metal pin of the ENFit connection as far as possible into the tube.

Secure the ENFit connection with the fixing screw.

Laparoscopy technique with cannula (long): Photographic version

Remove the screw aid clip.

While it has been the objective of Fresenius Kabi to develop accurate, easy-to-follow insertion suggestions, each healthcare professional inserting the enteral product must evaluate the appropriateness of the following technique based on his or her medical training, experience and patient evaluation.

Instructions for use

Placement of feeding tube

Three different options exist for feeding tube placement as detailed in the Instructions for Use.

Laparotomy with splitting cannula

1. Penetrate the abdominal wall diagonally with the blue cannula from cranial to caudal.
2. The tube is guided into the gastric cavity from the outside inwards through the split cannula.
3. Withdraw the split cannula.
4. Puncture in the opposite direction of mesentery into the wall of the intestine beyond the ligament of Treitz (the tip of the tube should be remote from the duodenojejunal flexure).
5. Stretch the jejunal loop and puncture diagonally into the submucosa, use the white cannula with the withdrawn mandrin.
6. After extending the blunt mandrin, tunnelling approximately 5-10 cm between the layers of the intestinal wall.
7. Remove the mandrin and use the cannula to puncture the lumen of the intestine.
8. Push the tube forwards through the cannula into the lumen of the intestine and slide forwards until it is approximately 30 cm into the lumen, with digital control.
9. Withdraw the split cannula through the tube and remove after splitting.
10. Using dissolvable purse-string sutures, which are first knotted around the puncture point as invaginated sutures and which serve as a temporary fastening at the parietal peritoneum with the same needle, seal off the entry point of the tube into the intestinal wall and attach the intestinal loop to the parietal peritoneum.
11. The intestine should also be sutured to the peritoneum a few centimetres above and below the point of entry of the tube in order to prevent dislocation due to rotation of the intestine.
12. Insert the tube into the guidance of the fixation plate and fix it with the clamp.
13. Secure the position of the tube by tacking the fixing plate on the abdominal wall about 1-2 cm from the entry point.
14. After attaching the tube clamp, first push the fixing screw over the tube.
15. Then push the metal pin of the ENFit connection as far as possible into the tube and secure it with the fixing screw.
16. Pull down the screw aid (external grooved ring) and remove it.

Important information

The correct position of the feeding tube must be checked by x-ray.

Instructions for use

Laparotomy without splitting cannula

1. Puncture in the opposite direction of the mesentery into the wall of the intestine beyond the ligament of Treitz (the tip of the tube should be remote from the duodenojejunal flexure).
2. Stretch the jejunal loop and puncture diagonally into the submucosa, use the white cannula with the withdrawn mandrin.
3. After extending the blunt mandrin, tunnelling approximately 5-10 cm between the layers of the intestinal wall.
4. Remove the mandrin and use the cannula to puncture the lumen of the intestine.
5. Push the tube forwards through the cannula into the lumen of the intestine and slide forwards until it is approximately 30 cm into the lumen, with digital control.
6. Withdraw the cannula over the tube and remove it.
7. Penetrate through the abdominal wall diagonally with the blue cannula from cranial to caudal.
8. Carefully guide the tube from the inside outwards through the cannula, past the sharp-edged tip of the cannula.
9. Withdraw the cannula and remove.
10. Using dissolvable purse-string sutures, which are first knotted around the puncture point as invaginated sutures and which serve as a temporary fastening at the parietal peritoneum with the same needle, seal off the entry point of the tube into the intestinal wall and attach the intestinal loop to the parietal peritoneum.
11. The intestine should also be sutured to the peritoneum a few centimetres above and below the point of entry of the probe in order to prevent dislocation due to rotation of the intestine.
12. Insert the tube into the guidance of the fixation plate and fix it with the clamp.
13. Secure the position of the tube by tacking the fixing plate on the abdominal wall about 1-2 cm from the entry point.
14. After attaching the quick-release clamp, first push the fixing screw over the tube.
15. Then push the metal pin of the ENFit connection as far as possible into the tube and secure with the fixing screw.
16. Pull down the screw aid (external grooved ring) and remove it.

Important information

The correct position of the feeding tube must be checked by X-ray.

Instructions for use

Laparoscopy with cannula (long)

1. Fix the intestinal loop to the abdominal wall at two places.
2. Puncture the abdominal wall with the longer (white) cannula.
3. Puncture the intestine.
4. Push the feeding tube forward through the cannula approximately 30 cm.
5. Withdraw the cannula.
6. Attach the intestinal loop to the abdominal wall with dissolvable purse-string sutures until the tube is no longer visible.
7. Insert the tube into the guidance of the fixation plate and fix it with the clamp.
8. Secure the position of the tube by tacking the fixing plate on the abdominal wall, (1-2 cm from the entry point).
9. After attaching the tube clamp, first push the fixing screw over the tube.
10. Then push the metal pin of the ENFit connection as far as possible into the tube and secure with the fixing screw.
11. Pull down the screw aid (external grooved ring) and remove it.

Important information

The correct position of the feeding tube must be checked by x-ray.

Since the Freka FCJ is not secured in the jejunum with an internal retention plate, the tube must not be moved, and the attachment of the external retention plate to the abdominal wall must not be loosened under any circumstances.

Freka FCJ feeding tube removal

The threads of the retention plate are removed. Then the tube can simply be pulled out. Finally, a plaster dressing is applied until the stoma is completely closed. A 12-hour fasting period should be observed prior to any food intake.

The Freka FCJ can usually be removed without a jejunocutaneous fistula being left behind.

Instructions for use

Duration of use

In the past, the Freka FCJ feeding tube has been recorded as having been in place for several months without complications.

Aftercare of the puncture site

Use an applicator and a disinfectant to clean the puncture site underneath the fixation plate and dry well without removing the fixation plate. It is recommended to mark the length of the tube at the exit point to identify dislocation at an early stage. Cover the puncture site with a compress and plaster. In the first week after insertion the puncture site should be checked by a physician daily.

Aftercare of the feeding tube

The feeding tube must be rinsed through before and after every application of nutrition - at least once daily with 20 mL lukewarm water, preferably with a 20-60 mL Freka Connect ENFit syringe.

Important information

No acidic fluids, especially fruit teas or fruit juices, must be used as they can cause coagulation of nutrition constituents. The feeding tube must be replaced if blocked. The feeding tube lumen must not under any circumstances be forcibly unblocked under high pressure (i.e. using a small volume syringe) or using a mandrin. Otherwise, there is the risk of perforation of the feeding tube and injury to the patient.

Application of medication

Medicinal products should preferably be administered through the feeding tube in a dissolved form. Medicinal products in liquid form are preferable.

Important Information

The feeding tube must be carefully rinsed before and after every administration of medicinal product. Under no circumstances must medicinal products be administered with nutrition. The pharmacist should be consulted in the case of doubt.

Application of nutrition

Feeding into the small intestine can commence immediately after implantation of the feeding tube. High-molecule nutrition or low-molecule oligopeptide diets can be used for jejunal tube feeding dependent on digestion and resorption performance. In any case, nutrition intake must be increased gradually. The nutrition supply must be continually pump-controlled.

Important information

Do not use an infusion pump designed for parenteral application under any circumstances (risk of confusion).

Notes

Ordering information

Freka FCJ with Insertion Kit

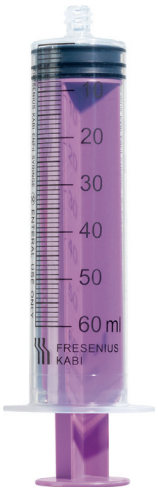
Single lumen postoperative feeding tube

Article code: 7755645
Sales Unit: 5 x 1

Freka Universal Funnel Adapter, ENFit

For compatibility of:
- ENLock sets to ENFit feeding tubes
- ENLock syringes to ENFit feeding tubes
- For decompression with drainage bags

Article Code: 7755695
Sales Unit: 1 x 15



Freka Connect ENFit 60mL Syringe

Administration of nutrition and liquids.
Compatible to male ENFit connectors.
Sterile, single packed.

Article code: 9000786
Sales Unit: 50 x 1

Freka FCJ Repair Kit

For repair of an in situ Freka FCJ.
Kit contains:
- Tube clamp
- Freka ENFit connector
- Fastening screw

Article Code: 7981388
Sales Unit: 1 x 1

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