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ENTEROCUTANEOUS FISTULA AND COMPLEX HERNIA: SIMULTANEOUS SURGICAL CORRECTION – A FEASIBLE CHALLENGE

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Introduction

The repair of **complex abdominal wall hernias** (CAWH) using various techniques has developed rapidly in recent years, with the use of **synthetic prostheses in contaminated surgeries** remaining a topic of discussion. The presence of an **enterocutaneous fistula** (ECF) increases the risk of surgical wound complications and hernia recurrence, making its repair a surgical challenge.

Clinical Case

48-year-old woman with **morbid obesity** (BMI = 45 kg/m²), with a surgical history of urgent umbilical herniorrhaphy (2014) and retromuscular incisional hernioplasty (2015), both of which have recurred.

At the beginning of 2021, she underwent urgent exploratory laparotomy for a **strangulated incisional hernia** (Figures 1 and 2), with segmental ileal resection.

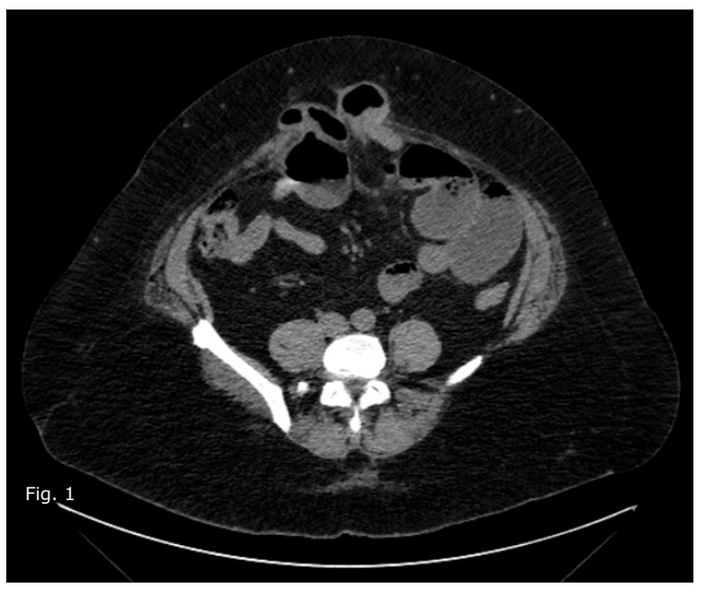
Fig. 1

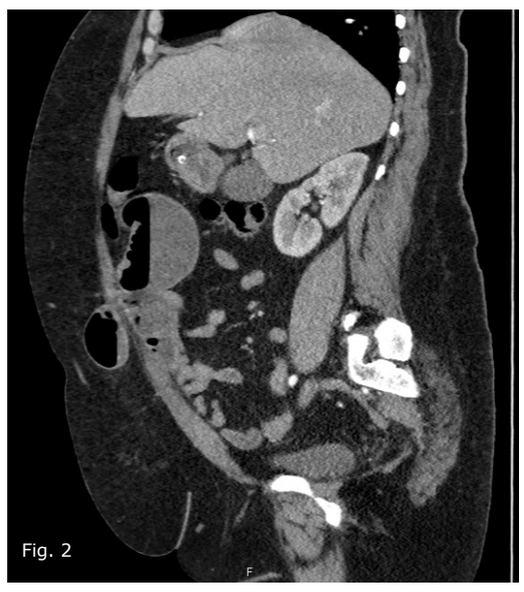
Fig. 2

Figures 1 and 2 – Abdominopelvic computed tomography (CT AP) images with contrast, showing intestinal obstruction due to an incarcerated hernia.

- Postoperative day 5: abundant serohemopurulent drainage from the surgical wound. Abdominopelvic CT scan (Fig. 3) without abdominal evisceration or anastomotic complication.
- Six days after discharge: readmission due to exuberant periumbilical inflammatory signs and enteric drainage. CT scan (Fig. 4) without clear evidence of communication with bowel loop.
- Dynamic study of the small intestine (Fig. 5) shows the existence of an **enterocutaneous communication via a fistulous tract**.


Fig. 3

Fig. 4


Fig. 5

During the re-intervention, a **laceration of the small intestine loop** was found due to the suture thread from the aponeurosis and abdomen classified as stage IV according to Bjork's classification.

1.The fistula was managed with a Pezzer catheter, a mini-laparostomy was performed with negative pressure dressing, and subsequent laborious management of the stoma (Fig. 6-11).

Fig. 6

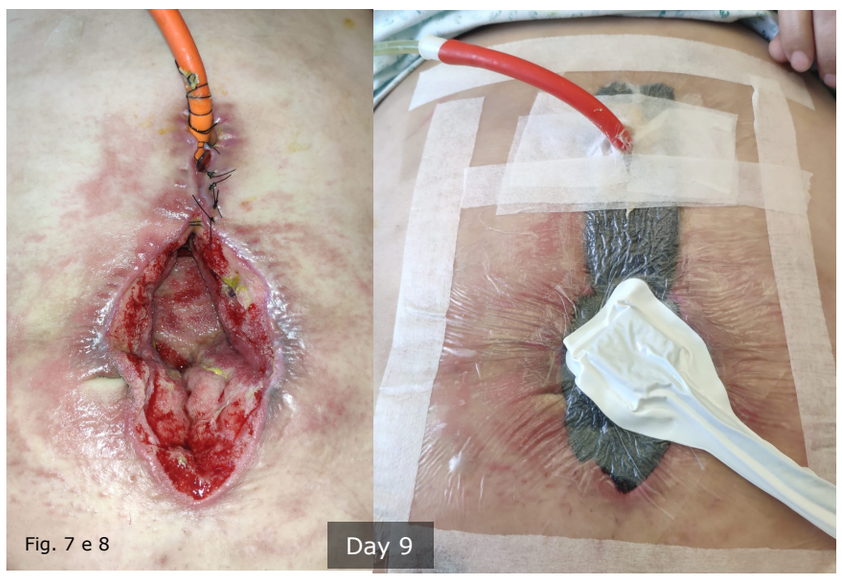

Fig. 7 e 8

Fig. 9 e 10

Fig. 11

2. Management of the enterocutaneous fistula with an **intestinal rehabilitation protocol**, anti-diarrheal agents (loperamide and codeine), a bi-daily proton pump inhibitor, optimized parenteral nutrition, Saint Mark's solution, and avoidance of hypotonic fluids.
3. Discharge directed to a complex abdominal wall unit for **elective correction of evisceration** → 1 year after the initial surgery.
4. In a single surgical session, **intestinal transit reconstruction** was performed with segmental enterectomy (Fig. 12) and correction of the incisional hernia using the **posterior component separation technique**, with bilateral release of the transversus abdominis and placement of a macroporous polypropylene mesh, 48g density, in a retromuscular position (Fig. 13).

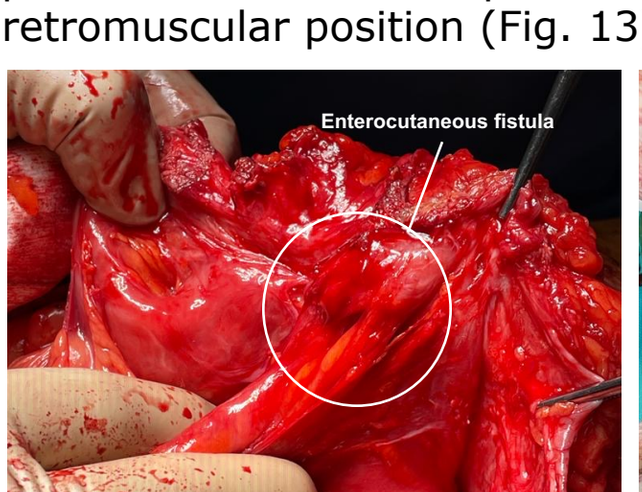

Fig. 12

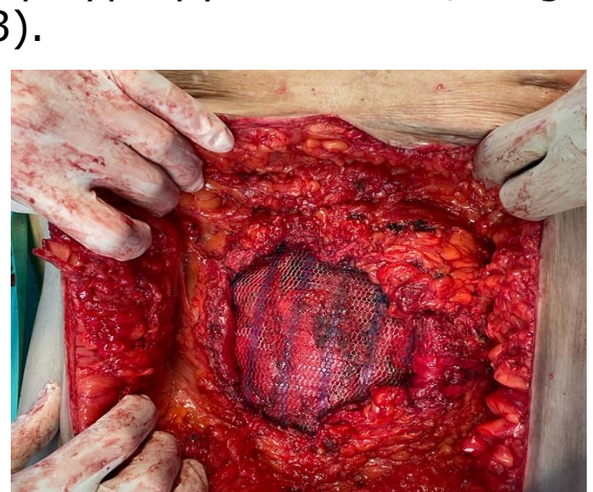
Fig. 13

Fig. 14

Fig. 15

The postoperative period proceeded without complications, and the patient was discharged on the 6th postoperative day. Follow-up with no complaints and no evidence of recurrence (Fig. 14 and 15).

Conclusion

Although there is no consensus regarding the simultaneous approach to complex abdominal wall hernias (HCPA) and high-output enterocutaneous fistulas (FEC), this approach has proven advantageous, with acceptably **low morbidity and appreciable results**, both in hernia correction and in the management of high-output fistulas and their associated complications, improving various aspects of the patient's quality of life.