

# Surgical repair of parastomal hernia after Bricker procedure: consecutive experience of a tertiary center

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# Material and methods

- 23 patients operated of PH after Bricker between 2014 and 2020
- 13 males /10 females, median age 67
- Demographic characteristics, intraoperative data, postoperative complications and follow-up were collected for each patient in their medical records
- Pre et post CT imaging reviewed by a radiologist => PH stage with Moreno-Matias classification and size of the hernia sac

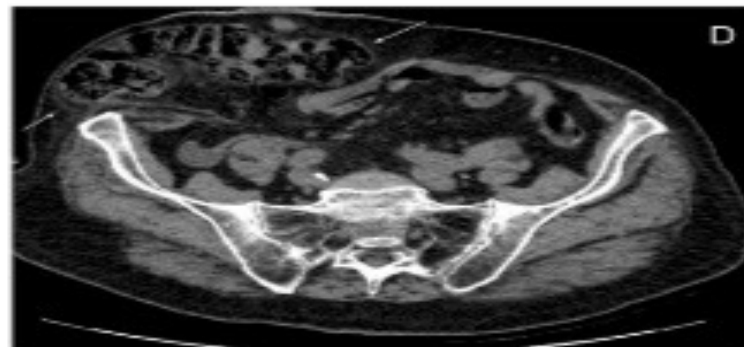
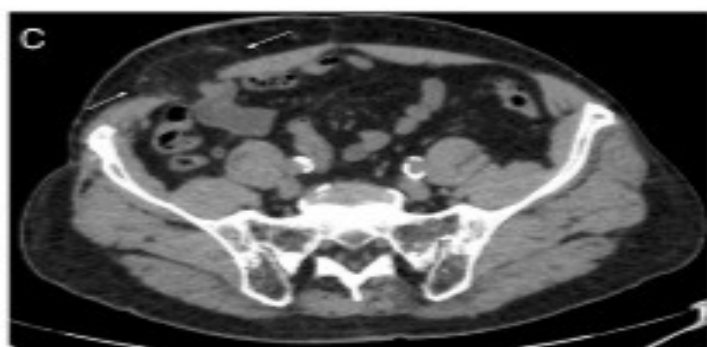
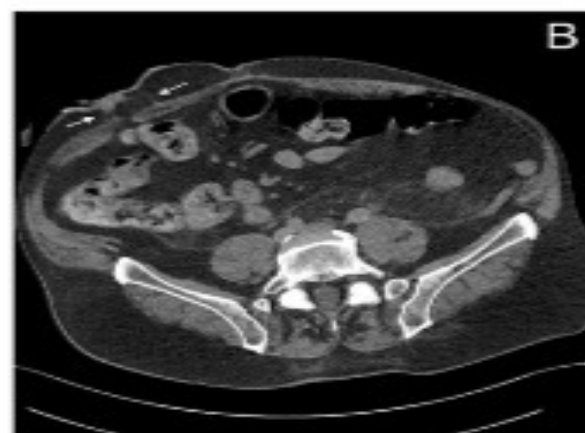
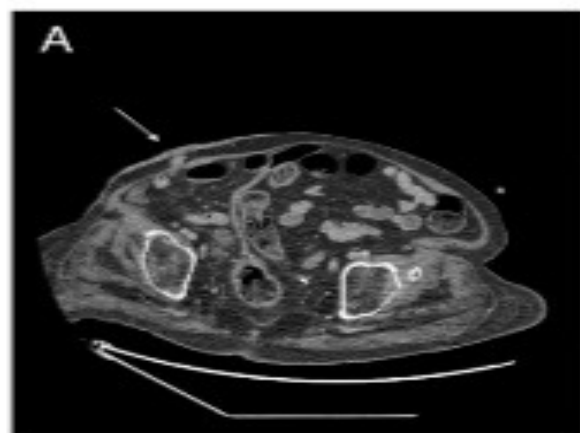
# Material and methods

- Sex (M/F)
- Age (years)
- BMI (Kg/m<sup>2</sup>) : <25 (normal), 25-30 (overweight), >30 (obesity)
- ASA score
- Indication for surgery (benign ou malignant)
- Neo-adjuvant ou adjuvant treatment
- Smoking (active, former, non-smoking)
- COPD (with ou without chronic cough)
- Diabete (IR ou NIR)
- Corticoïdes and/or immunosuppressive treatment
- History of previous surgery for ventral hernia and/or PH with or without mesh
- Previous laparotomy
- GFR (mL/min/1,73m<sup>2</sup>)
  - Normal RF (>60) = 52%
  - Moderate RF (30-59) = 39%
  - Severe RF (15-29) = 9%
  - Terminal RF (<15) = 0%
- Serum creatinine (mg/dL) => anormal in 39%
- Serum Protein (g/L)

**Table 1.** CT classification of parastomal hernia after radical cystectomy, adapted from Moreno-Matias (18).

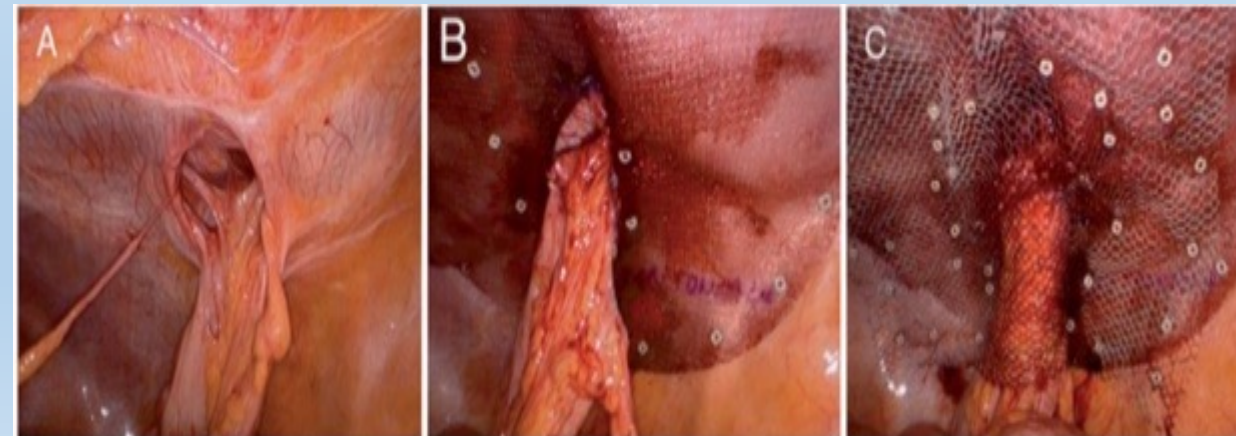
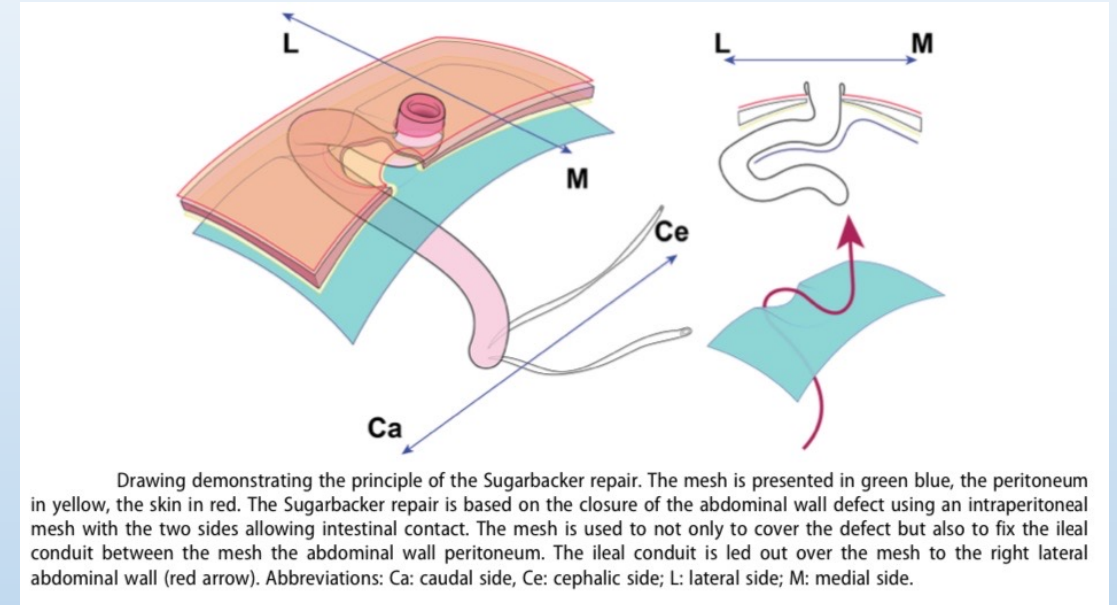
Type	Content of the hernia sac
0	Peritoneum follows the wall of the ileal conduit, with no sac formation
Ia	Bowel forming the ileal conduit with a sac <5 cm
Ib	Bowel forming the ileal conduit with a sac >5 cm
II	Omentum
III	Colonic or intestinal ileal loop other than the ileal conduit

CT: computed tomography.



# Results

- All patients (n=23) had Moreno-Matias type III PH
- 16 (70%) Sugarbaker, 7 (30%) Sandwich
- 16 (70%) laparoscopy, 2 conversions, 9 corrections of midline incisional hernia repair during same procedure
- 4 (17%) severe complications (Clavien-Dindo >3a)
- 4 days (1-25) median hospital stay
- 2 reoperations, 1 for acute ileal conduit ischemia and 1 for mesh migration
- 2 early recurrence (1 and 5 months post-op) with Moreno-Matias type III
- Early recurrence occurred in the only 2 patients with **immunosuppressive treatment**, and both had a Sugarbaker with a **Physiomesh<sup>®</sup>** and a previous surgery by **laparotomy**
- 2 late recurrence (16 and 37 months post-op) with asymptomatic Moreno-Matias type Ia / 1 Sugarbaker and 1 Sandwich, no risk factors identified
- $P > 0,05$  for the choice of sandwich or sugarbaker according to hernia sac size



# Conclusion

- Our observations confirmed the literature as surgical repair of PH after Bricker is a challenging procedure that may be performed by minimal invasive techniques with intraperitoneal meshes. The two techniques of Sugarbaker and Sandwich are safe with an acceptable rate of recurrence.