# Robotic-Assisted Sugarbaker Parastomal Hernia Repair in Morbid Obese Patient

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## INTRODUCTION

- Parastomal hernia is a prevalent complication post-colostomy or ileostomy, with reported incidences reaching up to 50%.[1)]
- These hernias can cause abdominal discomfort and disrupt the fit of stoma appliances, markedly diminishing patient quality of life (QOL).
- In certain instances, parastomal hernias may lead to bowel obstruction or ischemia.
- While lifestyle changes and abdominal support belts can provide symptomatic relief, severe cases necessitate surgical intervention.
- Among the various surgical techniques available, the Keyhole and Sugarbaker mesh methods standout.
- The recent increase in robotic surgery across numerous surgical disciplines is noteworthy, particularly for its benefits in complex cases that are challenging for traditional laparoscopic approaches, such as in patients with high BMIs.
- We present successful management of robotic-assisted parastomal hernia repair utilizing the Sugarbaker technique in apatient with morbid obesity.

## CASE PRESENTATION

- 47-year-old female.
- Ht 152.4cm, Wt 104kg, BMI 44.8.
- History of subtotal colectomy with end ileostomy for colonic inertia in 2021.
- She subsequently developed a sizable parastomal hernia, which is believed to be a consequence of her morbid obesity and smoking habits.
- The patient experienced intermittent obstructive symptoms, prompting the decision to opt for surgical intervention.

**Figure1: Ports placement**

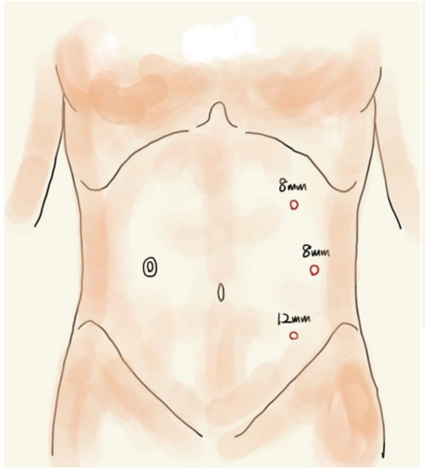
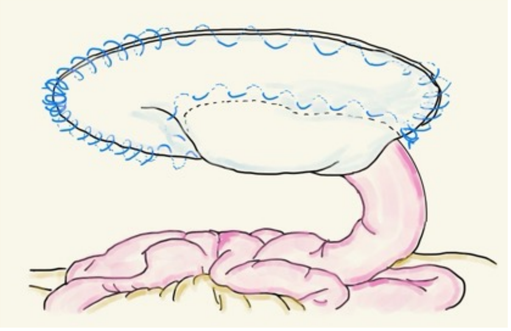



**Figure2: Sugarbaker repair**



## PROCEDURE

- Two 8mm trocars were placed on the left side of the abdomen and a 12mm trocar on the left lower quadrant. (Figure1)
- An incarcerated parastomal hernia was identified and the small bowel was reduced.
- A hernia defect measuring 4cm was observed and primarily repaired around the parastomal hernia using a 0 V-Loc suture.
- A 4.5-inch round Ventralight ST mesh, in the style of Sugarbaker, was placed with the inferior exit of the terminal ileum, secured with 3-0 V-Loc sutures.(Figure2)

## DISCUSSION

- We completed the robotic-assisted Sugarbaker parastomal hernia repair in a morbidly obese patient.
- Hernia recurrence rates for laparoscopic Sugarbaker repairs are notably low, reported at 11.6%, which is favorable compared to the 20% associated with open repairs.[2)]
- While comprehensive data on robotic repairs is not yet available, preliminary evidence suggests that the precise fascial closure and mesh placement afforded by the robotic approach could further diminish the likelihood of recurrence.
- A small case series (N=15) indicated a promising recurrence rate of only 6.7%.[3)]
- Robotic-assisted Sugarbaker repair is thus advocated for patients with morbid obesity due to its increased precision and safety, improved visualization, and the potential to decrease rates of recurrence and complications
- Further case accumulation and research are expected in the future.

## CONCLUSION

- This case highlights the effective use of robotic-assisted surgery in a morbidly obese patient undergoing the Sugarbaker technique for parastomal hernia repair.
- Ongoing research and accumulating clinical experience are expected to further validate robotic assistance as the method of choice for managing parastomal hernias, particularly in individuals with significant obesity.

## REFERRENCES

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