Advancing Health A CASE STUDY from MedStar Colorectal Surgery

Sphincter-Sparing Surgery:

Robotic Surgery Improves Outcomes in Treatment of Rectal Cancer

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Abstract

In recent years, the treatment of a low rectal cancer was often invasive and resulted in a prolonged hospital stay and a permanent colostomy. In this case study, the patient underwent chemoradiation prior to minimally invasive and sphincter-sparing robotic low anterior resection (LAR) with diverting loop ileostomy. Two weeks post-procedure, she is cancer free and has resumed her normal, active lifestyle.



CASE STUDY

Sphincter-Sparing Surgery

Patient Presentation

- A 61-year-old female presented with intermittent left lower abdominal pain, blood in stool, and diarrhea for three months.
- Past medical history: hypertension, hypothyroidism, and rosacea.
- Past surgical history: Cesarean section and laparoscopic Nissen fundoplication.
- Assessment:
 - Colonoscopy revealed a large 4 cm multi-lobulated, moderately differentiated adenocarcinoma in the low rectum involving half the circumference.
 - CT scan of the chest, abdomen and pelvis showed no evidence of metastatic disease and her CEA level was normal.
 - Rectal exam revealed a tethered mass posterior just above puborectalis from 3 to 8 cm from the anal verge. A rectal ultrasound revealed uT3, N0.

Diagnosis

 Moderately differentiated invasive adenocarcinoma of the rectum (T3, N0, M0 lesion).

Treatment

• 6 weeks of pre-operative chemoradiation.

 6 weeks post chemoradiation, minimally invasive robotic low anterior resection (LAR) with hand-sewn coloanal anastomosis and diverting loop ileostomy.

Outcomes

- Patient hospitalized for four days following surgery.
- Pathology revealed 1.6 x 1 cm rectal ulcer with no residual malignancy.
- Two weeks post-procedure: The patient is cancer free, tolerating a normal diet, and has resumed her active lifestyle. Patient will return for ostomy reversal.

Conclusion

- For low-lying rectal cancers, pre-operative chemoradiation therapy and minimally invasive sphincter-sparing surgery can help patients maintain anal function and avoid permanent colostomy while minimizing pain and shortening recovery time.
- As seen on final pathology, 25% of patients have a complete response to pre-operative chemoradiation. Clinical trials are underway to pre-operatively determine if there are patients who can safely avoid surgery.



James FitzGerald, MD

"The surgical robot allowed me to offer the patient the benefits of minimally invasive surgery: smaller incisions, less discomfort and a faster recovery. It is just one of the advanced technologies that our team offers. Additionally, we are participating in national clinical trials to determine if there are patients who can avoid surgery altogether."

Leading the Way:

The Area's Most Advanced Team of Fellowship-Trained and Board-Certified Colorectal Surgeons

Our team of eight fellowship-trained, board-certified colon and rectal surgeons is the most experienced in the Greater Washington region and is nationally recognized for its expertise, commitment to excellence and professional leadership. Our colorectal specialists treat the most advanced, complex diseases and disorders of the colon, rectum, and anus, including patients with multiple co-morbidities such as heart disease. All of the surgeons work collaboratively with other physicians to evaluate treatment options and to develop a comprehensive, integrated and coordinated care plan with each patient.

Specializing in minimally invasive surgeries when possible, MedStar's colorectal surgeons use state-of-the-art techniques that have reduced post-operative pain and shortened post-operative recovery time.

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For more information, please call the MedStar Colorectal Surgery team at **202-877-8484** or visit **MedStarWashington.org/Colorectal**.