

# Devices Used During Endoscopic Mucosal Resection (EMR)



Case presented by:  
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## PATIENT HISTORY

This patient is a 71-year-old female who initially sought consultation with a general surgeon for rectal prolapse. Her complaint was complicated by significant constipation and straining with bowel movements. A colonoscopy was performed by the surgeon at an outlying facility. A 4.5 cm polypoid mass with a broad base was described in the rectum approximately 5 cm from the anal verge. Multiple biopsies were obtained, however the mass was left in-situ. The pathology report from the biopsies diagnosed a villous adenoma. On follow up, the surgeon recommended a trans-anal resection of the lesion in the operating room under general anesthesia.

The patient presented to me for a second opinion consultation regarding the management of the mass. A repeat colonoscopy was recommended.

## PROCEDURE

A standard colonoscopy was undertaken and the cecum was intubated without difficulty. Along the anterior rectal wall, a 4.5 cm polypoid mass was encountered. The mass had a moderate sized base. There were no surface ulcerations or depressions to suggest dysplastic transformation. A Captivator II Snare was used to grasp the lesion, and it was removed en-bloc with one pass of electrocautery. Using the TWISTER® Rotatable Polyp Retrieval Device the polyp specimen was retrieved and delivered to a formalin jar for pathologic analysis. The polypectomy defect was then re-approximated with clips.

## POST PROCEDURE

Pathological diagnosis of the polyp revealed a large villous adenoma without high-grade dysplasia. One month post procedure, the patient was doing well. Her complaints of rectal prolapse, constipation, and straining with bowel movements have resolved. A repeat surveillance colonoscopy is planned in one year.

## DISCUSSION

Rectal prolapse occurs when part or all of the wall of the rectum slides out of place, sometimes protruding out of the anus. A variety of risk factors for prolapse exist, including weakening of the pelvic floor muscles with advanced age, chronic constipation and straining. Rectal polyps are an uncommon cause of prolapse, serving as a lead point for rectal mucosal intussusception.

This case demonstrates the importance of skilled endoscopists with cutting edge support equipment in the management of large polyps. The Captivator™ II Snare was pivotal in this case. The snare's large diameter aperture allowed for complete en-bloc resection of the polyp with one pass. The stiff braided metal filament achieved a clean-cut mucosal resection without the need for excess cautery. The TWISTER® Rotatable Polyp Retrieval Device, with its large aperture and capacity, allowed for easy retrieval of a large intact polyp specimen from the rectum with minimal manipulation. Although the post-EMR defect was not actively bleeding, it is my practice to employ the principle of improved wound healing with primary closure over that of secondary intent. The clip of choice is the Resolution™ Clip, capable of opening, closing, and repositioning. The deployment apparatus is also less prone to technician error and failed deployments than other clips on the market. A repeat colonoscopy achieved complete resolution of the patient's complaints.



Figure 1



Figure 2



Figure 3



*Results from case studies are not predictive of results in other cases. Results in other cases may vary.*

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