"Cap Polyposis": A Rare Condition In A Pediatric Patient Successfully Treated With Wide-field Endoscopic Resection (WEMR)

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Introduction

Cap polyposis is a rare condition in the rectosigmoid colon manifested by inflammatory polyps covered by a thick layer of fibrinopurulent mucus. Clinical presentation is usually mucoid diarrhea and rectal bleeding, and treatment options include antibiotics, steroids, infliximab, or aminosalicylates. Surgical management is an option for unresponsive disease, but endoscopic management has been rarely reported.

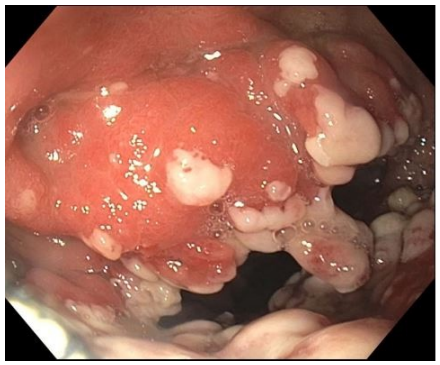

Figure 1: colonoscopy showed multiple friable polyps with, white areas on the surface.

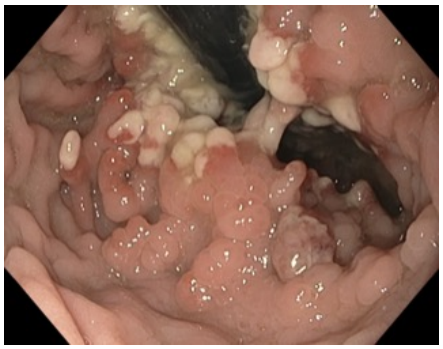

Figure 3: The polypoid areas were nearly circumferential in the midrectum, with some extending down close to the dentate line.

Case Description

- A 16-year-old boy had a 10-year history of mucoid diarrhea, occasional rectal bleeding, and frequent incontinence. Endoscopy revealed pseudopolyps in the rectum (Fig. 1) that appeared inflammatory with granulation tissue (Fig. 2).
- Initial laboratory evaluation revealed mild iron deficiency anemia and hypoalbuminemia. The patient was treated with limited polypectomy, topical steroids, and diphenoxylate-atropine, which did not resolve his symptoms. The remainder of the colonoscopy and magnetic resonance enterography was not consistent with inflammatory bowel disease. Multiple 1-2 cm lobulated polypoid lesions were seen in the rectum (Fig. 3). It was felt that the marked polyposis in the rectum was suggestive of "cap polyposis". *H. pylori* testing was negative. There was no improvement with metronidazole or with antidiarrheal medications.
- Initially ESD was considered but deemed unsuitable due to poor lifting of the lesions. Thus, wide-field endoscopic mucosal resection (WEMR) was performed (Fig. 4). Approximately 40 band ligations with snare endoscopic resection were performed with near complete removal of all of the lesions. There were no post-procedure adverse effects. Histology was consistent with cap polyposis, with one area of high-grade dysplasia away from the resection margin.
- After the endoscopic resection, the patient's symptoms completely resolved. A second-look sigmoidoscopy 3.5 months later revealed only a slightly nodular area with no signs of dysplasia or cap polyposis (Fig. 5).

Histopathology

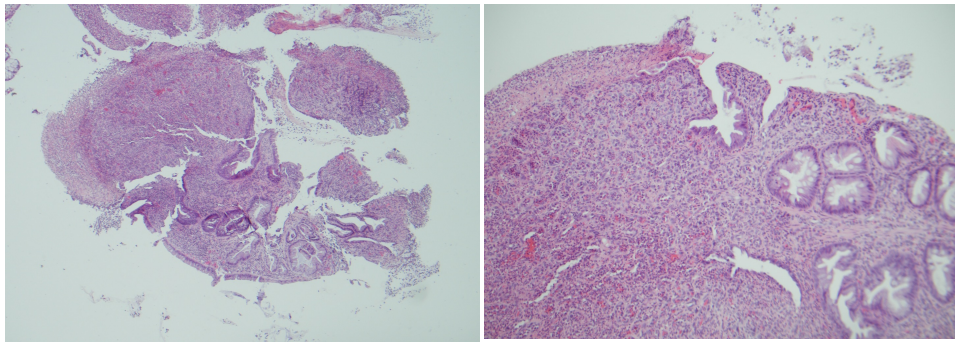

Figure 2: (A) Low-power magnification (2×; hematoxylin and eosin stain) showing hyperplastic and tortuous crypts with adjacent inflamed lamina propria. (B) Higher-power magnification (10×; hematoxylin and eosin stain) demonstrating ulcerated granulation tissue and focal fibrinous exudates at the surface.

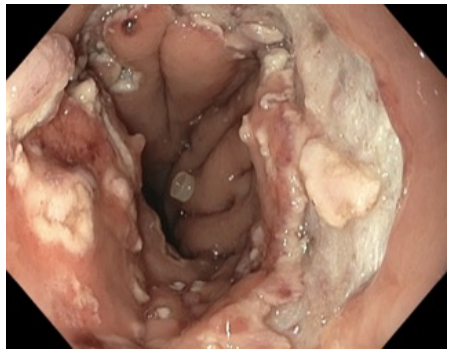

Figure 4: During W-EMR resection, an area of confluent mucosectomy was seen in the rectum. A repeated ligation EMR was performed at 40 separate sites.

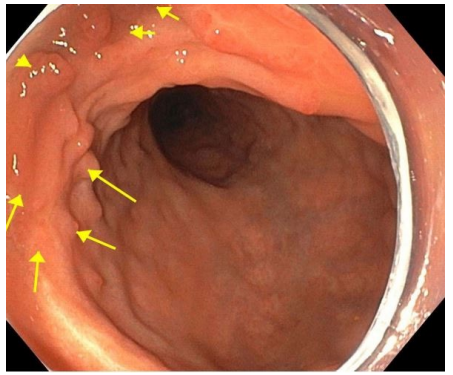

Figure 5: Follow-up colonoscopy showed nearly complete resolution of the polyps, with only a small residual area of nodularity (arrows).

Discussion

Patients with cap polyposis typically report mucoid stools and rectal bleeding, with a characteristic appearance on colonoscopy and pathology. For cases of cap polyposis in which conservative medical management fails, wide-field endoscopic mucosal resection is a valuable option.

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