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# Polyp that Wears a Cap: A Case of Inflammatory Cap Polyposis Mimicking Neoplasm

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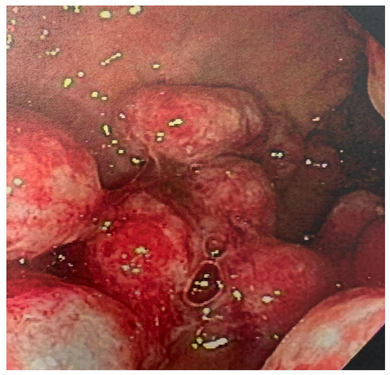
## Introduction

- Inflammatory cap polyposis (ICP) is a rare and benign condition with findings of multiple inflammatory polyps of granulation tissue with a cap of fibrinopurulent mucus.
- ICP can mimic an aggressive colon pathology. It is occasionally misdiagnosed as Inflammatory Bowel Disease (IBD) or colorectal cancer leading to unnecessary interventions.
- We present a severe case of ICP which led to more than 30 colonoscopies and polypectomies.

## Case Description

- 73-year-old man with smoking history presented with chronic constipation, mucus in stool and painless hematochezia.
- Colonoscopy revealed ulcerated, friable polyps with mucus plug in the rectosigmoid area.
- Initial Pathology showed hyperplastic, tubular, and tubulovillous adenomas.
- IBD and infectious workup were negative.
- He received Miralax for constipation and Balsalazide for misdiagnosed ulcerative colitis from 2013 to 2020 but continued to have multiple recurrent polyps.
- Given perceived precancerous polyp burden with gross aggressive appearance, hemicolectomy was initially proposed.
- Review of pathology, however, confirmed that the polyps had similar features of ICP.
- He has undergone multiple colonoscopies each requiring several cold snare polypectomies.
- His symptoms and polyp burden have significantly improved and in the last colonoscopy, he had less than five benign polyps.



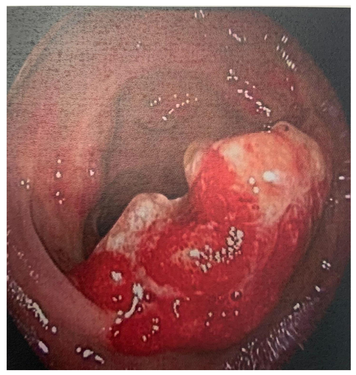


Figure 1: Ulcerated, friable pedunculated polyps with mucus caps in the rectosigmoid region
Figure 2: Ulcerated, friable pedunculated polyps with mucus caps in the rectum.

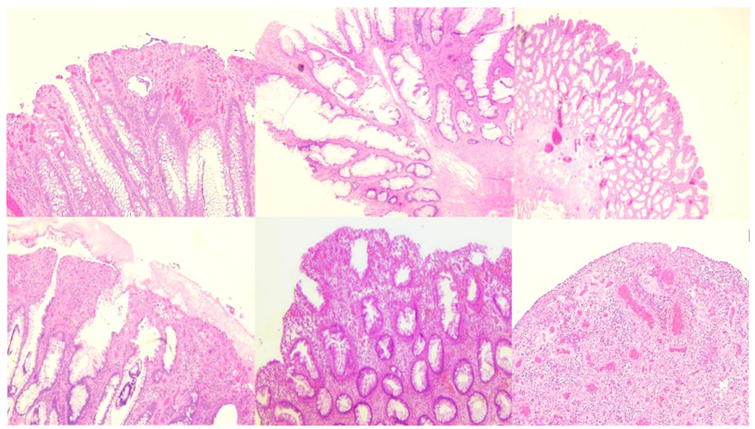


Figure 3: Bottom right showing granulation tissue; Bottom left- mucus cap on top of the polyp.

## Discussion

- Since being introduced in 1985, ICP's etiology and therapy are poorly understood.
- **Proposed etiology**: abnormal colonic motility causing mucosal prolapse, luminal trauma, dysbiosis of gut microbiota, and chronic infections with H. pylori or E. coli.
- **Presenting features**: abdominal pain, chronic constipation, tenesmus, mucoid diarrhea, hypoproteinemia and hematochezia.
- **Endoscopic features**: sessile, semi-pedunculated, or plaque with a white superficial ulcerated surface as large as a few centimeters.
- **Histologically:** overlying eroded fibrinopurulent "cap" with elongated and dilated crypts full of mucus and inflammatory cells.
- **Proposed treatments:** treatment for constipation, dietary modifications, antibiotics, steroid course, **infliximab**, polypectomy, and colectomy.
- However, recurrence is common including those who underwent colectomy.
- Gastroenterologists and pathologists should be familiar with this rare pathology to prevent misdiagnosis and unnecessary treatment or interventions.
- It is crucial to diagnose pre-cancerous or neoplastic polys and it is equally important to not misdiagnose benign rare etiologies like CAP.
- More research needs to be done to evaluate preventive and curative therapy for this benign pathology.

## References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*This research was supported (in whole or in part) by HCA and/or an HCA affiliated entity. The views expressed in this publication represent those of the author(s) and do not necessarily represent the official views of HCA or any of its affiliated entities.*

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