Successful surgery-sparing endoscopic removal of an ICV polyp with the use of Dilumen device

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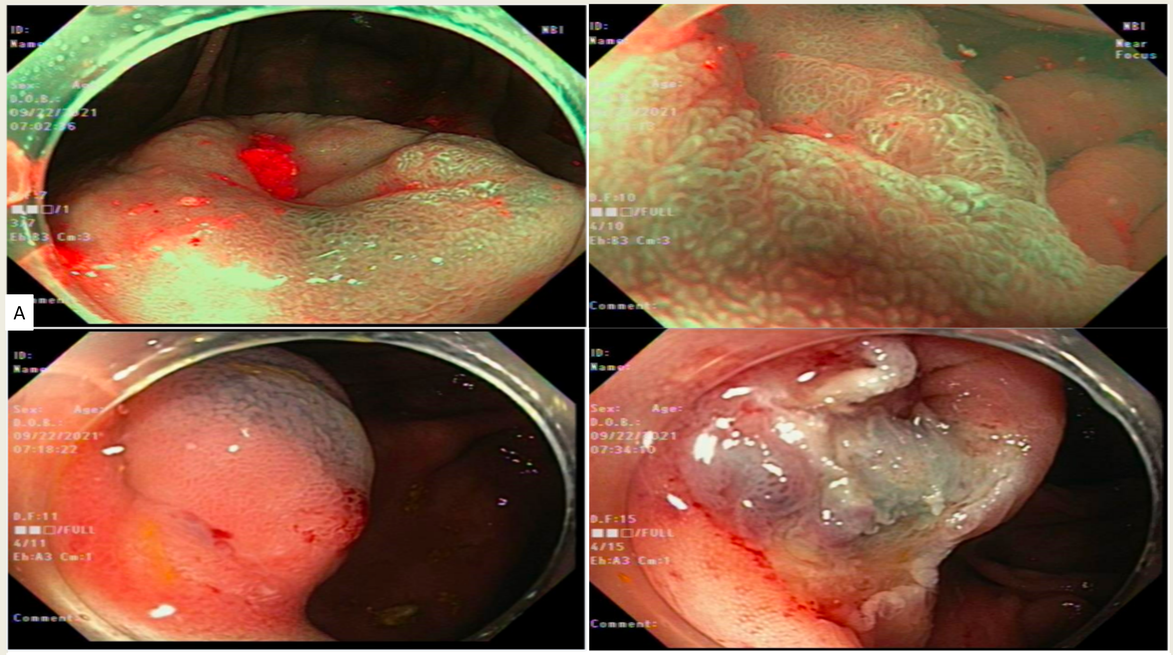
INTRODUCTION

- Ileocecal valve (ICV) polyps are technically challenging to remove endoscopically
- IVC polyps often reoccur with a rate of 18.6%.
- We report on a case of an ileocecal valve polyp that underwent multiple failed attempts of endoscopic removal. It was successfully removed on the third attempt, using the Dilumen device.

CASE PRESENTATION

- A 72-year-old Caucasian male with known past medical history of coronary artery disease, history of myocardial infarction, congestive heart failure, paroxysmal atrial fibrillation not on anticoagulation, COPD, emphysema, tobacco use, neurogenic claudication, hypertension and hyperlipidemia
- He referred for completion polypectomy of a 10mm flat ileocecal valve (ICV) polyp after 3 failed colonoscopy removal attempts by referring gastroenterologist due to colon tortuosity and polyp location.
- Pathology of the partially removed polyp showed adenoma with high grade dysplasia (HGD).
- Vitals, physical exam and laboratory data were unremarkable.
- Patient had a BMI of 29.9 and Anesthesia physical status classification of III
- He had a Revised Cardiac Risk Index for Pre-Operative Risk (RCRI) of 2 points which indicates a 15% 30-day risk of death, myocardial infarction, or cardiac arrest.
- Patient refused surgical management with ileocecectomy due to list of comorbidities making the surgery very high-risk and complications of the ileocecectomy.
- He prefers endoscopic treatment, if possible. He agreed to a third colonoscopy and, due to history of failed attempts, we utilized the Dilumen device to assist with the endoscopic procedure.
- The device provided stability in positioning the colonoscope that allowed complete removal of the residual ICV polyp via en bloc endoscopic mucosal resection (EMR).
- The edges were treated with snare tip coagulation.
- Pathology came back as adenoma with HGD with clear margins.
- Patient is doing well post-procedure with no issues.

IMAGES



A - Narrow Band Imaging (NBI) of the ICV polyp ; B - Near focus evaluation of the ICV polyp ; C – Submucosa lifting of the ICV polyp ; D - Post EMR of the ICV polyp

DISCUSSION

- ICV polyps usually pose a great challenge for EMR due to its location and tendency to extend into the terminal ileum and around the valve orifice. This makes it technically difficult to completely resect the lesion and poses a high risk for recurrence. In fact, a study showed that only 76.3 % of the large polyp (size >20mm), can be resected endoscopically in the ICV versus 91.3% resection rate in non-ICV area. Frequently, surgical referral would be the alternative option but more complications can occur after invasive surgery. In order to avoid surgery, a few novel techniques have been developed.
- Dilumen is an endoscopic accessory sheath consisting of two balloons that can be manually inflated and deflated as needed. The balloons can facilitate endoscope navigation by shortening and straightening the colon similar to double balloon assisted enteroscopy. This improves access for the endoscope to maneuver in between and remove the polyp. In our patient, it helped greatly in removing the difficult ICV polyp and the patient was able to avoid undergoing surgery.