

Should we perform polypectomy or not?

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A 78-year-old woman, with a known history of rheumatoid arthritis, complained of dizziness and was found to have iron-deficiency anaemia with a haemoglobin level of 105 g/L in January 2013. She was on treatment with methotrexate, sulphasalazine, and non-steroidal anti-inflammatory medications. Oesophagogastroduodenoscopy performing for anaemia showed a linear ulcer over the anterior wall of the stomach. Subsequent colonoscopic examination was done to look for the cause of iron-deficiency anaemia and revealed a 1 cm-long everted umbilicated polypoid lesion in the ascending colon (Fig a). On close examination of the lesion using narrow band imaging (NBI), the mucosal pattern was normal with no endoscopic features of adenomatous polyp. Upon further air insufflation, the everted lesion invaginated and turned into a diverticulum (Fig b). Thus, a diagnosis of an inverted colonic diverticulum (ICD) was made.

Inverted colonic diverticulum is a rare condition. A retrospective analysis of colonic examinations showed that the prevalence was only 0.7%.¹ The majority (approximately 75%) of ICDs were found in the sigmoid colon.¹ Right-sided colonic ICD, as illustrated in our case, was not commonly seen. An ICD is typically described as a broad-based lesion with normal overlying mucosa lying within a bed of colonic diverticula. It can resemble an adenomatous polyp of variable size. It is essential to correctly diagnose this condition as inadvertent 'polypectomy' may potentially lead to bowel perforation. Currently, there are several endoscopic strategies that can help in distinguishing ICD from an adenomatous polyp. Firstly, gentle air insufflation may cause eversion of

inverted diverticula. In some cases, a jet of water may be used to flatten the lesion.² Secondly, probing the lesion gently with a biopsy forceps will show a soft lesion with easy indentation. Interestingly, it was recently suggested that the presence of Aurora rings can support the diagnosis of an ICD.³ Aurora rings are described as concentric rings surrounding the base of an ICD which can be demonstrated with the use of NBI or chromoendoscopy. If doubt exists, double-contrast barium enema or computed tomography colonography may help to distinguish between the two entities. Endoscopic ultrasound (EUS) has also been used to characterise such lesions. In a report, the diagnosis of sigmoid ICD was made by the EUS features of a thickened but normal-looking colonic mucosa in a polyp-like lesion.⁴ Most importantly, endoscopic removal and biopsy of ICD should be avoided as potentially fatal bowel perforation may occur.⁵

In conclusion, ICD is an uncommon but important clinical finding. Endoscopists should always be aware of the possibility of ICD during colonoscopic examination as inadvertent biopsy or resection of these lesions can lead to potentially serious complications.

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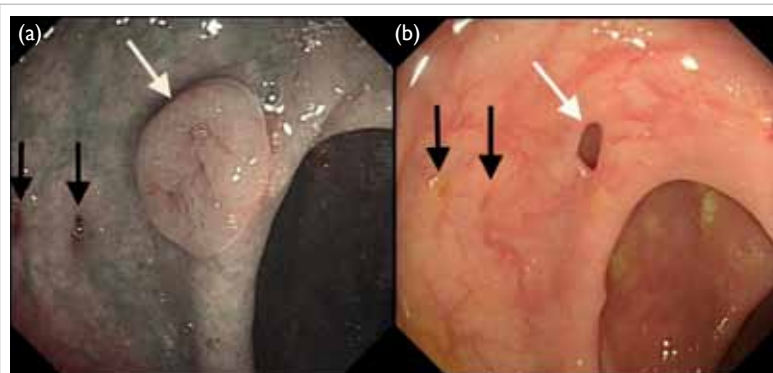


FIG. (a) An inverted colonic diverticulum (white arrow) was found next to two small diverticula (black arrows) by narrow band imaging. (b) The inverted colonic diverticulum (white arrow) which was located next to the two small diverticula (black arrows) invaginated and became a diverticulum