

Title:

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Off-label use of 0.4% sodium hyaluronate teardrops for endoscopic resection of a rectal carcinoid

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Different substances are used for submucosal injection in order to perform a safe endoscopic mucosal resection. Viscous solutions such as sodium hyaluronate are currently considered the first line substances for submucosal injection. This product produces a durable lifting of the mucosa. However, this solution is expensive and only available in Japan. We report on the use off-label of 0.4% sodium hyaluronate teardrops as a substance for submucosal injection.

A 17-year-old male suffering from chronic abdominal pain and diarrhea had been initially diagnosed with irritable bowel syndrome. The patient was unresponsive to various treatments. Finally, after finding leukocytes in stool an ileocolonoscopy was performed. Only one polypoid lesion of sub-epithelial appearance with 9 mm diameter was found in the lower rectum. Biopsies were taken and a carcinoid tumor was diagnosed.

We proceeded to perform a ligation-assisted endoscopic mucosal resection (EMR-B) using a gastroscope (Fig. 1). After submucosal injection of 0.4% sodium hyaluronate teardrops, an elastic band was placed at the base of the lesion. Snare excision was performed underneath the elastic band. No complications occurred. Histopathologic analysis showed

a well differentiated neuroendocrine tumor, mitotic index 1/10 CAP, Ki67 4%, borders free of neoplasia without presence of lymphatic or vascular invasion. The patient showed clinical improvement after resection.

The present report confirms the optimal efficacy and safety profile of the 0.4% sodium hyaluronate teardrops as a substance for submucosal injection, leading to an adequate submucosal cushion avoiding the risk of perforation, as it has been shown in studies conducted with a larger number of patients ⁽¹⁾⁽²⁾. Furthermore, the use EMR-B allows to achieve higher rates of complete resection compared to conventional mucosectomy as has been shown by Ramage et.al ⁽³⁾.

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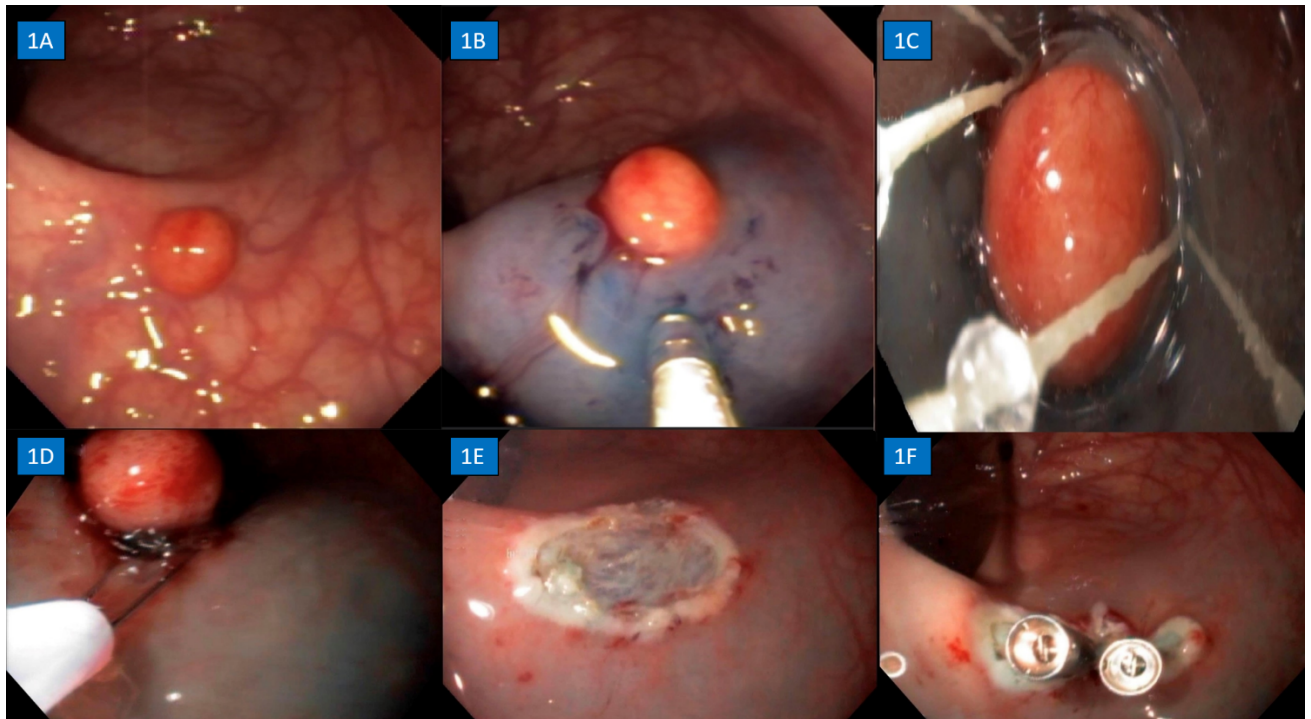


Fig. 1. A) Detailed endoscopic assessment with high-definition white light endoscopy. B) Submucosal injection to lift lesion with 0.4% sodium hyaluronate teardrops form (Lagricel Ofteno PF[®], Sophia Laboratory, Peru) mixed with saline solution 1/1 and a low dose of methylene blue. C) Location of the lesion within the cap. D) Location of the diathermy snare and mucosal incision underneath the elastic band. E) Detailed endoscopic assessment of the post-resection ulcer. F) Clips closure of the post-resection ulcer to approximate borders.