**(21233) - ANASTOMOTIC DEHISCENCE AFTER ENDOSCOPIC MUCOSAL RESECTION: A CASE REPORT**

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**Introduction:** Anastomotic dehiscence and leak formation are feared complications after colorectal surgery, leading to increased mortality and morbidity. As time goes on, colonic adenomas can develop on the adjacent mucosa; however, scarring poses a great challenge when choosing the appropriate technique and increases the risk of complications.

**Aim:** to describe a case of anastomotic dehiscence after endoscopic mucosal resection and its management

**Case Summary:** We describe the case of a 75-year-old male patient referred to our center for endoscopic resection of a rectal lesion. He had a history of colorectal anastomosis secondary to rectal cancer surgery 17 years ago. He denied previous radiotherapy or chemotherapy. Other comorbidities were obesity, hypertension, and diabetes. The lesion was staged with magnetic resonance imaging before the referral, showing no evidence of locally advanced disease. Colonoscopy showed a mixed nodular lateral spreading tumor, Is+IIa lesion (Paris classification), with 9 cm, located from 1 to 10 cm of the anal margin, occupying one-third of the bowel lumen. Mucosal and vessel pattern was regular on most of the lesion (JNET 2A); however, a slightly depressed area with mucosal irregularity was seen on the topography of the anastomosis – biopsies were significant for high-grade dysplasia. We evaluated the lesion to decide the optimal technique to perform excision. After applying the lift-up® solution, a 15-20 mm area adjacent to the anastomosis did not elevate. As such, we decided to proceed with piecemeal endoscopic mucosal resection (EMR) and snare tip soft coagulation of the borders. One month later, the patient complained of lower abdominal discomfort and tenesmus. Retrosigmoidoscopy revealed an anastomotic dehiscence at 8 cm of the anal margin, occupying 1/3 of the circumference of the rectum, measuring 20x75 mm (width/depth). The patient was discussed with the multidisciplinary
colorectal team, and a decision was made to perform a protective colostomy and endoluminal vacuum therapy. The first session was performed 35 days after the EMR and three days after the diagnosis of the dehiscence. New sessions were scheduled every 3-4 days, and in total, nine sessions were performed in one month, after which the cavity reduced its size to 10x20mm. In light of the improvement, we decided to stop and reevaluate after two months. In the follow-up colonoscopy, there was no sign of anastomotic dehiscence. Histology revealed carcinoma in situ. The patient is waiting for a colonoscopy to reassess the lesion six months after excision.

Relevance: This case describes the challenges when facing lesions in difficult locations, such as colorectal anastomosis. Although several techniques can be employed in endoscopic submucosal dissection to overcome fibrosis, and an en-bloc resection brings better oncological outcomes, we deemed the risk of dehiscence to be high. Despite incurring a complication, endoscopic vacuum therapy allowed for a complete recovery and avoidance of surgery.

Images: Anastomotic dehiscence on CT scan, anastomotic dehiscence on colonoscopy, lateral spreading tumor, mucosectomy scar, anastomotic dehiscence after endo-sponge, complete resolution of dehiscence

Palavras-chave: Anastomotic dehiscence, Endoscopic mucosal resection complication, Endoluminal vacuum therapy