

Case Report


Diamond Shaped Advancement Flap Anoplasty For Severe Anal Stenosis – A Case Report

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Abstract

Anal stenosis is a fibrous narrowing of the anal channel. It develops, in most cases, in the aftermath of proctologic surgical procedures with extensive anoderm excision or in the presence of chronic anal inflammation in patients with Crohn Disease. Diagnosis is essentially clinical. The most severe cases require anoplasty procedures with mucosal or anal flaps.

Key words

Anal stenosis, Anoplasty, Diamond shaped advancement flap.

Introduction

Anal stenosis post hemorrhoidectomy is thoroughly debilitating for the patients. Symptoms include constipation, pain and bleeding with defecation and a reduction of the caliber of stools. Prevention of postsurgical stenosis is based on a scrupulous surgical technique and on an extensive and carefully-planned follow up. Treatment is based on an initially conservative approach with

regularization of stool transit through hydration, dietary fibers and bulk-forming laxatives. The role of mechanical dilatation in the treatment of anal stenosis is still debated. For severe cases and cases that are not responsive to conservative treatment we must resort to surgery. Surgical approach is tailored on the severity, position and extension [1].

Case report

A 34 years old gentleman with no known comorbidities was presented to Department of General Surgery, Kalinga Institute of Medical Sciences, Bhubaneswar, in June 2021, as a post operative case of hemorrhoidectomy which was done in first week of March 2021 with complaints of pain and difficulty in passing stool along with thin stream of stool passage after excessive straining. Patient also underwent post operative anal dilatation as advised by his previous surgeon.

On per-rectal examination patient had scar mark of previous surgery. On digital rectal examination, there was a 5 mm anal opening, not permitting examiners little finger. He underwent anoplasty with diamond shaped local advancement flap. The marking of hexagonal skin flap was done. Lateral sphincterectomy was carried out followed by which incision was placed over the markings and deepened. In the anal opening at 3 o'clock position anal mucosa was sutured to the medial portion of the hexagonal skin flap on local advancement followed by suturing the edges using vicryl 3-0 interrupted sutures .Post-operative period was uneventful.

Patient was advised laxative syrup for 2 weeks. On follow up patient was able to comfortably pass stool with no pain (**Figure – 1 to 7**).

Figure - 1: Hexagonal skin flap marking.



Figure - 2: Lateral sphincterectomy.



Figure - 3: Hexagonal incision deepened.



Figure - 4: Lateral 1 cm skin approximated.



Figure - 5: Anal mucosa and advancement flap.



Figure - 6: Lateral edges approximated edge approximated.

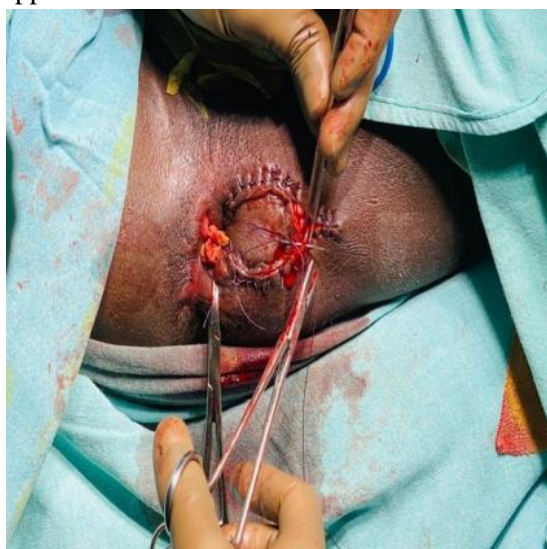


Figure - 7: Patient on POD-7 OPD visit.



Discussion

Anal stenosis is a rare but disabling disorder that often represents a complication of anorectal surgery. The use of an mucosal advancement flap is a safe and suitable option for the treatment of moderate and severe anal stenosis. The possibility of tailoring the flap, based on the degree as well as the level of anal stenosis, is the key [2]. For post-hemorrhoidectomy anal stenosis many surgical procedures have been described, but despite good results, many complications can ensue like flap necrosis, mucosal ectropion, and restenosis [3].

Carditello A, et al. conducted a study from January 1990 to December 2000, to evaluate the efficacy of anoplasty by mucosal advancement combined with internal sphincterotomy for the treatment of iatrogenic anal stenosis post-haemorrhoidectomy. The patients had mild postoperative pain. No significant complications were seen. The mean hospital stay was two days. Ninety-seven percent of patients were well satisfied with the surgical result one year after operation [4].

Conclusion

Diamond-flap anoplasty performed in a standardized and calibrated manner is a highly successful method for the treatment of anal stenosis caused by previous hemorrhoidectomy [5]. Thus surgeon should keep the patient on careful follow up to detect these complications early and to address them .

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