

Parastomal Hernia: A Case Report, Repaired by Modified Laparoscopic Sugarbaker Technique

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Abstract:- Parastomal hernia is a frequent complication of intestinal stomata. Mesh repair gives the best outcomes, with the lattice embedded by means of laparotomy or laparoscopically. Laparoscopic modified Sugarbaker technique utilizing composite mesh is most acknowledged in view of its low recurrence rate.

Keywords:- Modified Sugarbaker, Parastomal Hernia(PSH), Composite Mesh.

I. INTRODUCTION

Parastomal hernias are the most common long-term complication of stoma formation, with a very high incidence rate of 50% and recurrence rate of 18% post repair (1, 2). Most instances of PSH can be conservatively managed; although they might cause irritating side effects, for example, pain, spillage of stomal items and disfiguration of the affected part. Numerous usable methods have been proposed to address suggestive PSH, however up until this point, none have had the option to give palatable outcomes, particularly in the long run. [3].

Literature is suggestive of numerous accounts of open, laparoscopic repair of PSH, however laparoscopic repair with modified Sugarbaker technique is more preferred. This case report is an account of the same technique

II. CASE REPORT

A 75 years old man had undergone total proctocolectomy with permanent ileostomy for ulcerative colitis at 63 years of his age historically at a different center. He presented with abdominal discomfort 3 months prior to presentation in our medical facility. Abdominal computed

tomography (CT) revealed PSH. The defect measured 36 x 25 mm. Herniation of small bowel loops and mesentery was observed (figure 1).



Fig 1 CT Scan Showing PSH

III. METHOD

Patient was placed supine. 4 laparoscopic ports (inclusive of camera port) were placed. Defect was identified and adhesions were found around stoma and careful adhesiolysis was done. The size of defect was estimated and the overlapping composite 'proceed' mesh of dimensions 15cm² was rolled and introduced into abdominal cavity. In overlapping method, we suture 2 composite mesh in such a way that the smoothly coated sites face outward. Mesh was then stretched and stoma was covered. The bowel was lateralised and covered with mesh to allow a 5 cm overlap. The mesh was fixed with extracorporeal suturing with Ethilon 2-0. Tackers, twenty five in number, were applied for effective placement of the mesh.



Fig 2 Intra Op Image after Mesh Fixation

The post operative hospital stay was uneventful. And patient was discharged on post operative day 10 with outpatient management. Patient was followed up carefully and no recurrence was found at 6 months of follow up.

IV. DISCUSSION

Parastomal hernias are a usual and familiar complications followed by stoma creation that have a higher occurrence rate than different kinds of incisional hernia. The fundamental gamble factors for the improvement of parastomal hernias are weight, age, malignancy, IBD (inflammatory bowel disease), infection of the wound, steroid use, diabetes, loop ostomy, and surgical intervention in cases of emergency. (4).

The Sugarbaker technique (1985) is more superior to other techniques (like the keyhole technique) in both laparoscopic and laparotomic PSH repairs due to its lower recurrence rate and decreased risk of morbidity [5].

Although the clinical efficacy, rate of recurrence, and delayed complications require confirmation in most cases with long-term follow-up, laparoscopic repair of parastomal hernias with assistance of modified Sugarbaker technique (using composite mesh and lateralization of the bowel) is promising,

In the present day, there is a lack in the standards for uniqueness of meshes used in PSH repair. Literature reported meshes include expanded polytetrafluoroethylene, polyvinylidene difluoride, polypropylene, polyester, and biological meshes (6).

Here we used composite proceed mesh of 15cm².

The most common choice of material for mesh fixation are TACKS; herein, we used 5-mm titanium helical tacks to reliably fix the mesh.

V. CONCLUSION

PSH are most common complications after permanent ostomy. Repair Using mesh was more preferred than anatomical repair because of its low recurrence rate. Here we had done laparoscopic repair of PSH by modified sugarbaker technique.it is a safe and effective procedure.besides that laparoscopy is minimally invasive to patient's abdominal wall , which is already at risk for herniation.

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