

Short Term Outcomes of Stapled Hemorrhoidectomy Our Experience at GMC Srinagar

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Abstract:- Hemorrhoids are amongst the most frequent anorectal conditions affecting approximately 4 – 36% of the general population. The study was carried out to assess the short-term outcomes of stapled hemorrhoidectomy such as postoperative pain, intra operative major bleeding , post operative bleeding , urinary retention , perineal thrombosis , post operative wound site infection. A total of 60 patients were included in this study with symptomatic grade 3 and 4 prolapsed haemorrhoids. These patients underwent stapled hemorrhoidectomy from June 2020 to December 2022 at the Department of Minimal access and General Surgery Govt. Medical college Srinagar. In 47 patients (76%), proctological examination showed grade 3 hemorrhoids. Fourth degree hemorrhoids were found in 13 patients (23.4 %). Mean operating time was 40min (range 30 - 50min). None of the patients showed removal of incomplete doughnut (specimen) and major intra operative bleeding. Post operative hospitalization time ranged between 1-2 post operative days. 39 patients were discharged on the first postoperative day without severe pain , 18 patients were discharged on 2nd post operative day without severe pain and 3 patients were discharged on 2nd postoperative day with mild pain and on oral analgesic. Post operative primary haemorrhage , urinary retention , perineal thrombosis and post operative wound site infection was found in none of the patients. Therefore Stapled haemorrhoidectomy was found to be a safe and quick procedure associated with less pain, better out-come, and early recovery with shorter hospital stay.

I. INTRODUCTION

Hemorrhoids are amongst the most frequent anorectal conditions affecting approximately 4–36% of the general population[1,2]. Hemorrhoids are actually anal cushions that turn into pathological state, and they may present with anal bleeding , pain, and something coming out from the anus[1]. As many advancements have occurred in the management of colorectal diseases, there have been few amendments in the

management of hemorrhoidal diseases. Usually, first- and second-degree hemorrhoids can be treated easily and effectively in a conservative approach by dietary modifications and appropriate medications[3]. But surgical interventions are required for more severe hemorrhoids (third- and fourth-degree hemorrhoids) for which open Milligan Morgan[4] and the closed Ferguson [5] methods are standard surgical procedures. Unfortunately, these methods are associated with high incidence of complications[2,3]. To reduce the post operative complications, Dr. Antonio Longo[6] in 1998 proposed a stapled procedure as an alternative for the surgical hemorrhoidectomy, also known as circular stapled rectal mucosectomy. The aim of this new operative approach is to reduce the size of internal hemorrhoids by interrupting their blood supply , therefore reducing the size of the vascular cushions and reducing the rectal mucosa for the potential of prolapse . This procedure is associated with less post operative pain as there is no perianal wound and the rectal wall above the dentate line has an insensitive mucosa . Several studies [6–9] have found that Longo’s procedure is simple, safe, and effective method that results in reduced postoperative pain , early recovery and shorter hospital stay. Therefore , objective of this study was to assess short term clinical outcomes of stapled hemorrhoidectomy and to compare our results with other published literature.

II. METHODS

Total 60 patients were included in this study with symptomatic grade 3 and 4 prolapsed hemorrhoids, who underwent stapled hemorrhoidectomy from June 2020 to December 2022 in Dept of Minimal access and General Surgery Govt. medical college Srinagar. Preoperative evaluation included general physical and complete proctological examinations (including ano rectoscopy sigmoidoscopy) as well as routine laboratory tests. Patients having grade 3 and 4 hemorrhoids were admitted (patients with thrombosis and anal fissure were excluded). Patients were admitted 2 days before surgery due to hospital routine. On the day before surgery all the patients were given peg

wash in evening and asked to take light meal in evening .PC enema was given on morning of surgery. Surgery was performed under spinal anesthesia in all cases. Stapled hemorrhoidopexy procedure was performed according to Longo’s technique[6]. All patients were operated in lithotomy position . After insertion of anal dilator in the anal canal , a purse-string suture is placed 4cm above the dentate line .Fig. (1), (2) [10]



Fig 1 Placement of Anal Dilator



Fig 4 Feeding of sutures.



Fig 2 Application of Purse String Suture 4cm Above Dentate Line.

Subsequently, a circular stapler is introduced trans anally . Fig : (3) The anvil of the device is positioned proximal to the purse string suture, and the suture is tied down on to the anvil.



Fig 3 Introduction of MIPH Stapler

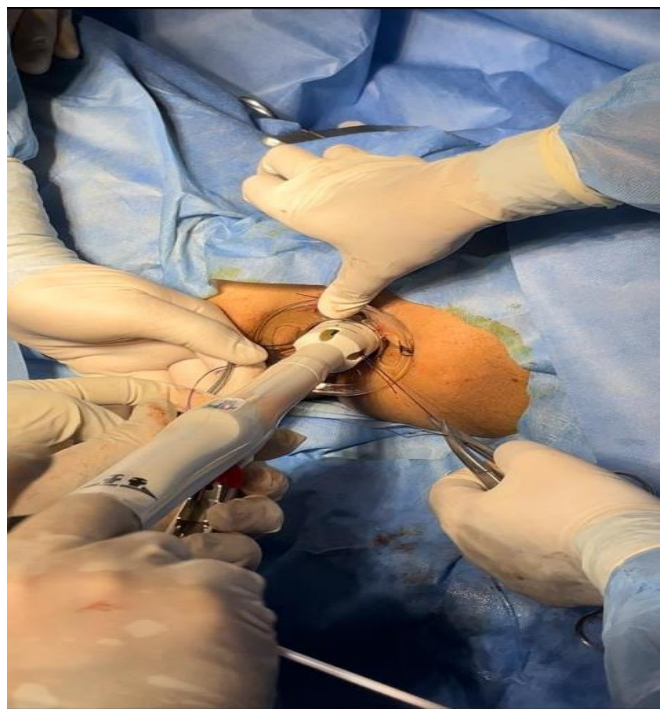


Fig 5 Firing of Stapler

Retraction of the suture pulls the attached rectal mucosa into the stapler.Fig. (4) Closure of the anvil and firing of the circular stapler simultaneously excise a ring of mucosa proximal to the haemorrhoid(s), thus interrupting the blood supply Fig .(5) [8] but maintaining continuity of the rectal mucosa[11].After shutting , the stapler was kept closed for 30 seconds to help achieve the hemostasis. The stapling line was then inspected, and when necessary, additional hemostatic suture was performed. Doughnut was removed, specimen sent for histopathological examination. Postoperatively, intramuscular injection of 75mg of diclofenac was used for analgesia within the first 12hrs. For further analgesia, intramuscular diclofenac was given when

needed. Patients were discharged on oral nimuslide 100mg to be taken when needed. Pain was assessed using a visual analog scale (VAS). Pain scores were evaluated at 6hrs , 12 hrs later and on the next two consecutive postoperative days.

Table 1 Characteristics of Patients

Characteristics	Number (n)	Percentage %
Male	42	70
Female	18	30
Degree of Hemorrhoids		
Third degree	47	76
Fourth degree	13	23.4
TOTAL PATIENTS	60	100

Patients were followed up 2 weekly in the first month, once a month for 6 months ,and then every 3 months for 1 year then yearly. Patient data on operative time, hospital stay, post operative analgesic requirements and complications such bleeding , urinary retention , post operative infection , thrombosis were noted on proforma. Descriptive statistics were computed and analyzed by SPSS.

III. RESULTS

A total of 60 patients were included in this study. Patients ages were between 20 and 70 years (mean age 50 years).There were 42 males (70%)and18 (30%) females. Preoperatively, 80% of patients(48) complained of anal bleeding and complaint of constipation was in 90% of patients (54). In 47patients (76%), proctological examination showed grade 3 hemorrhoids. Fourth-degree hemorrhoids were found in 13 cases (23.4%).All patients were given spinal anesthesia. Operative time duration (from anesthesia up to final wound dressing) ranged between 30 to 50 min (median of 40min).Complete removal of doughnut (specimen) was found in all patients. Post operative hospitalization time ranged between 1-2 days. 39 patients were discharged on the first postoperative day without severe pain, 18 patients were discharged on 2nd post operative day without severe pain and 3 patients were discharged on 2nd postoperative day with mild pain and on oral analgesics. Post operative pain was evaluated by the requirement of number of doses of analgesics (75mg diclofenac given intramuscular). The median number of doses for pain control was 1.5 (range 0–4 doses) during first 12 hrs. Primary postoperative bleeding , urinary retention , perineal thrombosis and wound site infection were reported in none of the patient.

Table 2 Symptoms before Surgery

Clinical symptoms	Percentage %
1.Anal bleeding	80
2.Constipation	90

IV. DISCUSSION

The most important disadvantage of conventional hemorrhoidectomy is postoperative pain[12]. In our study only 3 cases out of 60 had mild postoperative pain on 2nd POD and were discharged on oral analgesics to be used when needed. Postoperative complications other than pain

include urinary retention, post operative bleeding, sepsis, wound breakdown, unhealed wound , mucosa prolapse, anal stricture and faecal incontinence[12].These complications were not found in any of our operated patients. A study conducted by Riaz etal.[21] reported that out of 66 patients, 65 (98.48 %) were discharged on the day of operation after SH, which matched our study where maximum patients were discharged on 1st POD. Different clinical trials comparing the stapled and the Milligan-Morgan procedures have shown that stapled hemorrhoidectomy (SH) is associated with less complications[8]. Its advantage is lying mainly in the less postoperative pain, reduced total operation time and earlier recovery. As anticipated, the primary advantage of the procedure was pain reduction. Mehigan et al. [8] have shown that stapled hemorrhoidectomy patients showed the least mean values for pain on the visual analog scale when compared to the Milligan-Morgan procedure. Another study also found similar result when comparing both SH and MMH [9].On the basis of our study results, we recommend that stapled hemorrhoidectomy is a safe and quick procedure associated with less post operative pain and shorter hospital stay.

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