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A Prospective Study and Outcome of Stapled Heamorhoidopexy for the Management of Symptomatic Internal Hemorhoids

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Abstract:-Haemorrhoids are the most common anal disorders.stapled hemorrhoidopexy is recognised as effective and gold standard treatment modality of internal hemorrhoids. Aim and objectives of our study is management and outcome of symptomatic internal hemorrhoids by using a modern technique namely stapled haemorrhoidopexy. In summary,stapled hemorrhoidopexy is a new procedure. It has been found to be a successful and well accepted procedure forinternal hemorrhoids. It has low incidence of postoperative pain, low recurrence rate and high level of patient satisfication.

Keywords:- Internal Haemorrhoids; Stapled Hemorrhoidopexy.

I. INTRODUCTION

Hemorrhoids are one of the commonest medical condition in general population. According to the Google's annual round up in 2012(Google Zeigeist) hemorrhoids was the top trending health issue in United States ahead of GERD and STD(1).

Hemorrhoids are cushions of submucosal tissue containing venules, arterioles, and smooth-muscle fibers that are located in the anal canal. Hemorrhoidal cushions are three in number. They are found in the right anterior, left lateraland right posterior positions. Hemorrhoids are thought to function as part of the continence mechanism and aid in complete closure of the anal canal at rest. Hemorrhoids are only treated when they are symptomatic. However haemorrhoids are normal part of anorectum. increase venous engorgement of the hemorrhoidal plexus and causeThere are various causes of prolapse of hemorrhoidal tissue which includes increased abdominal pressure, excessive strainingand hard stools which results inoutlet bleeding, thrombosis, and symptomatic hemorrhoidal prolapse. (2)

Symptoms of pain and swelling can be reduced temporarily by topical medications,dietary modifications and soaking in warm water.

Hemorrhoidectomy is considered treatment of choice for symptomatic grade III and grade IV hemorrhoids. Unfortunately the procedures are associated with significant postoperative complications like postoperative pain, bleeding , wound dehiscence and anal stricture(3).

II. AIMS AND OBJECTIVE

Management and outcome of symptomatic internal hemorrhoids by using a modern technique namely stapled hemorrhoidopexy.

III. MATERIALS AND METHODS

We prospectively analysed64 symptomatic cases of internal haemorrhoids of grade II, III, IV between July, 2015, to December, 2016, and followed upto period of 1 year eighty from department of surgery, DVVPF's Medical college and hospital, Ahmednagar, Maharashtra.

A. The Inclusion Criteria

Patient of age 18 to 80 years fit to undergo surgery presentedwith

- Symptomatic grade II, grade III grade IV internal hemorrhoids**.**
- Thrombosed hemorrhoids.

B. The Exclusion Criteria

- Patients age group <18 yrs and >80 yrs.
- External hemorrhoids
- Inetrnoexternal hemorrhoids.
- Pregnant patients.
- Patients not fit to the surgical technique due to co morbidities.
- Hemorrhoids with fissure in ano.
- Hemorrhoids with fistula in ano.
- Complicated hemorrhoids except thrombosed hemorrhoids.

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C. Approach to the Study

- Written informed consent of patients.
- Per rectal bleeding history will be taken.
- Detailed clinical examination including detail per rectal examination done.
- All routine investigations done.
- Preoperative anesthetic fitness is taken.
- Preoperative preparation is done like-

  - Enema in the night before surgery.
  - Skin preparation by shaving
  - Pre operative dose of antibiotic.
  - Xylocaine sensitivity test.
  - Inj TT 0.5ml im.
  - Written informed consent.

- Patient is posted to Stapled Hemorrhoidopexy under GA/RA in lithotomy position.
- Patient is observed for immediate post operative complications on the day of surgery and after two weeks and managed accordingly.
- Post operative pain is assessed and managed with analgesics as needed.
- Antibiotics is given for about 5 days after surgery.
- On the day of discharge detailed assessment is done.

IV. RESULTS

Patients characteristics are summarized in table 1.

MALE	48 (75%)
FEMALE	16(25%)
MEAN AGE IN YEARS (RANGE)	66(18-80)
MEAN HOSPITAL STAY IN DAYS	15(12-20)
TOTAL DEATHS	NIL

Table 1- Characteristics of Patients

There were 64 patients in the study, 48(75%) men and 16(25%) women. Mean age was 48 years. Mean hospital stay in days was 15(range12-18). Hospital deaths were nil.

After all the preoperative preparation patient was posted for Stapled Hemorrhoidopexy. The postoperative complications were assessed in patients undergoing surgery.

Postoperative Complications	Day 1 (No. of patients)	Day 2 (No. of patients)	After 2 weeks (No. of patients)
Pain	6	4	2
Urinary retention	6	-	-
Gas incontinence	8	-	-
Constipation	12	8	4
Haemorrhage	4	2	1
Wound infection	-	-	2
Residual prolapse	-	-	2

Table 2 Depicts the Postoperative Complications

Postoperative complications were assessed on day 1, day 2 and after 2 weeks. Postoperative pain was more on day 1 as compared to day 2 and after 2 weeks. It was present in 6 (9.37%) patients on day 1 as compared to 4 patients on day 2 and 2 patients after 2 weeks. Urinary retention was present in 6 patients on day 1. Gas incontinence on day 1 was present in 8 patients. Constipation was a major complication which was present in 12 patients on day 1, 8 patients on day 2 and 4 patients after 2 weeks. Haemorrhage, wound infection and residual prolapse were minor complications which were present in very few patients.

V. FOLLOW UP

During the study period, follow up was carried out (mean follow-up time 12 months) after hospital discharge. There were no complications of surgical management nor readmission.

VI. DISCUSSION

Several surgical approaches for treating hemorrhoids have been introduced including open and closed hemorrhoidectomy, Injection sclerotherapy ,cryosurgery, infrared coagulation ,radiofrequency coagulation, laser surgery, Ligature humor hoidectomy, RBL, staple hemorrhoid dopey. Principle reason that patients avoid hemorrhoidal operations because of pain being the most frequent complicationand the most feared sequelae of the procedure from theperspective of patients. In our study,9.37% patients had pain.

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Various techniques used in the clinical trials have been closely examined in the perioperative time; however, none of them were effective for reducing postoperative pain.

Longo described a new surgical technique for reducing postoperative drawbacks of haemorrhoid surgery. "Procedure for prolapse and hemorrhoids" (PPH), was first described by Italian surgeon Antonio Longo in 1998, which is popularly known asstapled hemorrhoidopexy. This technique includes the favorable aspects of both excisional and fixative procedures. By using this techniqueit corrects the anatomic and physiologic abnormalities of symptomaticprolapsing hemorrhoids. It makes use of the theory of fixation by returning the vascular cushions to their anatomic location high in the anal canal[4,5].

Published data confirmed that stapled hemorrhoidopexy offers similar control of signs when compared with excisional techniqueswithadditional benefit of reduced postoperative pain. Most important benefit of this operation reduction of pain.[4]

The stapled hemorrhoidopexy is not a true hemorrhoidectomy. The stapling device excises a circumferential strip of the redundant mucosa-submucosa at the proximal aspect of the internal hemorrhoids. The excised tissue contains only a small portion of the internal hemorrhoidal tissue. The stapled anastomosis returns the internal hemorrhoids to their anatomic position within the anal canal, thereby serving as a neosuspensory ligament that is ultimately replaced by native fibrotic tissue. Thus, the stapled hemorrhoidopexy is primarily a suspensory, or fixative, technique. By restoring the internal hemorrhoids to this position and avoiding prolapse, venous drainage is improved and the remaining hemorrhoidal tissue will decrease in size back to the normally present vascular cushions. Because there are no wounds in the anoderm and the staple line is well above to the dentate line, postoperative pain is significantly reduced compared with excisional techniques. Thus, stapled hemorrhoidopexy provides the fixation of nonoperative techniques while offering patients single-session treatment and avoiding a painful cutaneous wound[6].

When compared with RBL in a trial conducted by Peng et al conducted in Singapore at an institution with considerable experience in stapled hemorrhoidopexy it is seen that 20% of RBL patients required subsequent excisional hemorrhoidectomy but none of the hemorrhoidopexy patients required additional operative therapy[7].

When compared with MMH in third degree hemorrhoid in a RCT conducted in University Hospital Hamburg it is seen that there is similar rate of recurrence in the long term and suggests increased patient comfort in the early postoperative course after stapled hemorrhoidopexy[8].

Long-term efficacies of procedure for prolapse and hemorrhoid and MMH in the treatment of gradeIII and gradeIV internal hemorrhoid is similar[9].

VII. CONCLUSION

In the present era Stapled Haemorrhoidopexy is the gold standard modality of internal haemorrhoids of grade II,III and IV. In our study we have got good results. In the literature, very few data isavailable on the outcomes of Stapled Haemorrhoidopexy, so it needs further more studies to prove its efficacy.

Footnotes

Conflict of Interest- None.

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