

A Comparative Study between MIPH versus Open Haemorrhoidectomy in a Tertiary Care Hospital**Vikram Vasuniya¹, Sangeeta Rajput², Dhyaneswar Damodar Kalani³, Anuj Dubey⁴, Afsan Parveen⁵**¹Assistant Professor, Department of Surgery, LNMC & JK Hospital, Bhopal (Madhya Pradesh)²PG Resident, Department of Surgery, LNMC & JK Hospital, Bhopal (Madhya Pradesh)³PG Resident, Department of Surgery, LNMC & JK Hospital, Bhopal (Madhya Pradesh)⁴Professor, Department of Anaesthesiology, LNMC & JK Hospital, Bhopal (Madhya Pradesh)⁵Assistant Professor, Department of Anaesthesiology, LNMC & JK Hospital, Bhopal (Madhya Pradesh)

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Corresponding Author: Dr. Afsan Parveen

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Abstract:**Background:** Haemorrhoids are one of the commonest ano-rectal problems worldwide. Open haemorrhoidectomy and MIPH are the currently available surgical interventions in the management of haemorrhoids. The aim of our study is to evaluate the effectiveness of MIPH over Open haemorrhoidectomy.**Method:** 60 cases were selected on the basis of inclusion criteria & divided into two groups of 30 each. MIPH was done in one group and Open Haemorrhoidectomy in other group. The duration of study was one year. The duration of Post-operative pain, Complications, Level of satisfaction was documented.**Result:** MIPH is a safe and effective procedure for grade 3rd & 4th haemorrhoids. Duration of hospital stay and post-operative complications are less and hence return to work is earlier.**Conclusion:** MIPH can be considered as a procedure of choice in patients presenting with grade 3rd & grade 4th haemorrhoids.**Keywords:** MIPH, Open haemorrhoidectomy, Grade 3rd & 4th.

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Introduction

Haemorrhoids are one of the most common ano-rectal problem in human history as well as in current population worldwide. [1] Symptomatic haemorrhoids such as pain during defecation, bleeding and sometimes a protruding mass outside the anus is commonly seen nowadays. Cushion is omnipresent in all sexes, races and age of people but fifty percent patients are symptomatic. [2] Vascular cushion of anal canal doesn't differ anatomically in normal population from those of symptomatic patients. And the treatment is to give relief from chief symptoms like bleeding and protrusion of mass outside the anus. Internal haemorrhoids, which are symptomatic anal cushions located at 3, 7, and 11 O'clock positions, involve the enlargement and distal displacement of normal anal cushions.

This condition affects a lot of individuals, presenting a significant medical challenge. [3,4] Internal haemorrhoids are positioned above the dentate line and are covered with mucous membrane, while external haemorrhoids lie below the dentate line, covered by skin and are more painful. Prolapse of haemorrhoids (Grade II-IV) can lead to other symptoms like mucus discharge, pruritus, loss of discrimination and continence to flatus, and sometimes faecal incontinence.

Nowadays, a wide variety of treatment like life style modification, dietary modification, bowel habits, mucosal fixation, widening of anus, excision of the internal anal vascular cushion and external vascular channels are some of the most popular treatment modalities. The treatment of 3rd

and 4th degree haemorrhoids is mostly surgical. Haemorrhoidectomy is one of the most commonly performed ano-rectal operations.

Earlier described treatment which was very painful during pre-anaesthetic era and later use of monopolar cautery is mostly used for this surgical procedure.[5] Now Choice depends on the degree of prolapse and availability of advanced gadgets. 30-40% patients require surgical treatment. Conventional haemorrhoidectomy is most commonly performed operation and having good results. It's a painful procedure resulting in prolonged hospital stay which result in increased work off time for approx. 2-4 weeks. These procedures can have certain complications like haemorrhage [6], urinary retention, stenosis and incontinence etc.

A new and promising surgical method known as MIPH (Minimum Invasive Procedure for Haemorrhoids) is the treatment of choice which causes minimal post-operative pain because the anastomosis lie above the dentate line and is done by a Stapler and is known as Stapled Haemorrhoidopexy. Advantage of this procedure is patients are discharged early and their return to work is earlier.

Methodology

Our study design was Prospective, Observational and Comparative study, which was done in Department of Surgery, LNMC & JK Hospital, Bhopal (M.P.) during the period of 1 year between July 2023 to June 2024 in 60 patients of both the genders. Study was approved by IEC (Institutional Ethical Committee) &, a written as well as Verbal informed consent were taken from all the patients who participated in our study. A detailed history, thorough clinical examination and necessary investigations were performed in each case according to planned proforma. All patients were investigated for routine investigations including CBC, BT, CT, Blood Sugar, S-urea, and Serum creatinine, HIV, HBsAg, Urine complete, X-Ray Chest and ECG. Per rectal examination done for anal sphincter tone, pain, any rectal growth, prolapse, bleeding, and discharge. Proctoscopy done to evaluate positions and grades of piles.

All patients above the age of 18 years, with Grade 3rd or Grade 4th haemorrhoids were included.

Patients with possible Tumour, Previous history of Colorectal Surgery, Low Grade Haemorrhoids, Fissure-in-Ano, Rectocele, Anal stenosis, Bleeding diathesis, any systemic diseases and patients unfit for spinal anaesthesia were excluded. These 60 patients were equally divided into two groups, Group A and Group B by using Odd-even method. Group A underwent MIPH and Group B underwent Open haemorrhoidectomy. Pre-operatively patients were kept nil per oral overnight as well as explained about the procedure and received a Phosphate enema in the morning of day of Surgery. One dose of Ofloxacin and Metronidazole were given at the time of anaesthesia during surgery. All operations were performed in the lithotomy position under spinal anaesthesia. Spinal anaesthesia was given by same experienced Anaesthesiologist on each patient. Pain was assessed using VAS Score at 0, 3, 6, 12, 24 hours post-operatively. Duration of surgery, duration of hospital stay, intra-operative bleeding along with any incidence of post-operative urinary retention, bleeding, rectal discharge for first 48 hours will be recorded. Follow up was done at 1,2,3 and between 6-8 weeks postoperatively.

Result

In our study, we compared the two different type of surgeries (MIPH & Open Haemorrhoidectomy) for grade 3rd and above haemorrhoids in total 60 patients. The average age of patients in our study was 43.8 years & ratio of Male: Female is 74%:36%. The average duration of surgical procedure was 28 minutes in group A & 57 minutes in group B. All the 60 patients were presented with complaints of bleeding per rectum, Prolapsed mass & Pain. On comparing post-operative finding, only 1 patient in MIPH group is having bleeding and 8 patients of group B is having bleeding per rectum. 10 patients had residual prolapse in group B while no patients had residual prolapse in group MIPH. Bowel movements appear earlier post-operative in MIPH group as compare to group B. Post-operatively, patients of MIPH experience lesser pain as compare to group B. Immediate post-operative complications (like Retention of urine, Incontinence, bleeding, pain etc) were seen more in group B as compare to group A. Mean duration of hospital Stay as well as mean duration of Return to work was very less in group A as compare to group B.

Table 1:

Serial No.	Group A (n-30)	Group B(n-30)	p-value
Age	44.7	46.1	p-value> 0.003
Gender Distribution	M>F	M>F	p-value> 0.003
Duration of Surgery	28.2 minutes	57.4 minutes	p-value< 0.003
Post-operative VAS	3-4	7-8	p-value< 0.003
Post-operative Complications	2	21	p-value< 0.003
Hospital Stay	1-2 days	3-4 days	p-value< 0.003
Return to work	3-4 days	15-20 days	p-value< 0.003

Discussion

In our study, we had compared the two different surgical procedures for the same clinical complains in two equal groups of 30 patients each. All the patients were selected on the basis of inclusion criteria, & those who came under exclusion criteria were excluded. All the 60 patients were demographically statistically non-significant. All 60 patients are having complains of Bleeding per rectum, Pain, Mass coming out from rectum, which was also seen in other studies.[7,8,9] Most of our patients had haemorrhoids at 7'O clock, 11'O clock & 3'O clock position. The duration of surgery in group A was 28 minutes & in group B, it was 57 minutes, which was statistically significant (p-value < 0.003). Difference in these two surgeries was also seen in other studies. [7,10]

During post-operative period, Group A patients had less complications (2 were having bleeding per rectum), as compare to Group B patients (11 patients had a complain of residual prolapse & 8 patients had complain of bleeding per rectum). On comparing these 2 groups, Post-operative complications are statistically significant with p value < 0.003. Bowel movements was appeared early in group A as compare to group B which was again statistically significant (p-value <0.003), which was also mention in other studies. [10,11] Post-operative analgesic requirement in group A was less than group B because in MIPH Haemorrhoidopexy is performed above the dentate line, where mucosa is insensitive to pain, these finding was also seen in other studies [10]

There was a statistical significant (p-value <0.003) difference in duration of hospital stay & return to work in both the groups as it was very less in group A as compare to group B (In group A, it was 1-2 & 3-4 days while in group B, it was 3-4 & 15-20 days respectively). These difference was also seen in other studies [7, 11, 12]. Faster wound healing, Better patient compliance, less post-operative pain along with shorter stay at hospitals has resulted in better acceptability of MIPH surgery over the years. The cost of surgery in MIPH group was significantly higher when compared to the Group B with a p value of 0.001.

Conclusion

MIPH is a safe and a new technique which comes as an alternative to Open Haemorrhoidectomy with less intra as well as post-operative complications. Duration of hospital stay and return to work was also comparatively less in MIPH surgery.

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