Research Article

INTERNATIONAL RESEARCH JOURNAL OF PHARMACY

www.irjponline.com

ISSN 2230-8407 [LINKING]

EXAMINING OPEN (MILLIGAN MORGAN) HAEMORRHOIDECTOMY WITH AND WITHOUT LATERAL INTERNAL SPHINCTEROTOMY (LIS)- A COMPARATIVE STUDY

Dr. Diwakar Yadav

Assistant Professor, Department of General Surgery, Icare Institute of Medical Sciences and research & Dr. Bidhan Chandra Roy Hospital, Haldia, West Bengal

Email: diwakarprasad84@gmail.com

How to cite: Yadav D. Examining open (Milligan Morgan) haemorrhoidectomy with and without lateral internal sphincterotomy (LIS)- a comparative study. International Research Journal of Pharmacy. 2021;12(8):62-65.
Doi:10.7897/2230-8407.1208159

==========

ABSTRACT

Background: Both men and women, as well as those in their middle years, are frequently afflicted with haemorrhoids, a benign ailment of the anorectal area. Haemorrhoids' precise incidence is yet unclear.

Aim: The purpose of this study was to compare the postoperative discomfort experienced by patients who underwent open (Milligan Morgan) haemorrhoidectomy with and without lateral internal sphincterectomy (LIS).

Methods: In Group I, 100 participants aged 20 years or older who had Milligan Morgan haemorrhoidectomy with LIS were evaluated, while in Group II, 100 participants did not have LIS. In terms of postoperative discomfort and results, the data were compared.

Results: For both groups, the average follow-up period was six months. After a week, 74% (n=74) and 56% (n=56) of the participants in Group I and II, respectively, reported feeling less pain. After a month, 94% (n=94) and 76% (n=76) of the participants in Group I and II, respectively, reported feeling less discomfort. By one month, 96% (n=96) and 66% (n=66) of the participants in Group I and II had healed ulcers. By the end of three months, 6% (n=6) and 2% (n=2) of the individuals in Groups I and II, respectively, had mild incontinence with mucous discharge, with non-significant findings.

Conclusions: Based on fewer complications and longer-lasting pain alleviation, the current study indicates that Miligan-Morgan haemorrhoidectomy with LIS is a more successful surgical strategy than Miligan-Morgan haemorrhoidectomy without LIS.

Keywords: Milligan-Morgan, hemorrhoidectomy, hemorrhoids, LIS, Lateral Internal Sphincterotomy

INTRODUCTION

Haemorrhoids, which are typically regarded as benign, are one of the most frequently reported anorectal problems. Both sexes and middle-aged persons are equally affected by haemorrhoids. Younger subjects are impacted as well, though. With just a few literature studies revealing a 39% incidence of Grades I to IV haemorrhoids defined based on the international classification of haemorrhoids in the contemporary adult population, the precise incidence of haemorrhoids worldwide remains uncertain.[1,2]

In the anal canal, haemorrhoids have a cushion of submucosal vascular tissue that starts close to the dentate line. Symptomatic haemorrhoids are the most prevalent perianal illness. Uncomfortable discomfort during the first week following surgery is the primary complaint for haemorrhoids. The internal sphincter spasm that is revealed after haemorrhoidectomy is the cause of this discomfort, particularly in young patients with increased anal tone.[3,4]

According to data from the literature, many approaches have been investigated for the management and mitigation of post-hemorrhoidectomy discomfort. As time went forward, internal sphincterectomy was seen as a viable adjunct to haemorrhoidectomy for improved postoperative discomfort in terms of less problems. By reducing the internal anal sphincter's spasm and pressure (hypertonicity), internal sphincterectomy lessens post-hemorrhoidectomy discomfort and further minimises problems after the procedure.[5]

Comparatively evaluating postoperative discomfort in patients treated with open (Milligan Morgan) haemorrhoidectomy with and without LIS (Lateral Internal Sphincterectomy) was the goal of this study.

MATERIALS AND METHODS

Comparatively evaluating postoperative discomfort in patients treated with open (Milligan Morgan) haemorrhoidectomy with and without LIS (Lateral Internal Sphincterectomy) was the goal of the current prospective observational research. Prior to participation, all individuals gave their verbal and written informed permission. For Milligan-Morgan, 200 patients of both sexes who were at least 20 years old were included in the study. One hundred (Group I) of the 200 participants underwent Miligan Morgan haemorrhoidectomy with LIS, whereas the other 100 (Group II) underwent Miligan Morgan haemorrhoidectomy without LIS. In addition to having symptoms and indications of recurrence of both internal and external haemorrhoids, all individuals had previously undergone one or more sessions of conservative therapy. Information was noted. The research excluded participants who were over 50, had a history of anal procedures, were pregnant, had a fistula, or had inflammatory bowel disease. Subjects who had never had anal surgery, were at least 20 years old, and had haemorrhoids of the II, III, or IV degree were eligible to participate. Prior to surgery, proctoscopies were performed on all individuals.

In order to do a Miligan-Morgan haemorrhoidectomy, the anus was fully dilated using spinal anaesthesia in a lithotomy posture. Following the incision, a V-shaped incision was made at the interface of the epidermis and haemorrhoid mucosa to gently remove the haemorrhoid nucleus of external haemorrhoids. In order to dentate the line till the haemorrhoid top was clamped and sutured at the mucosa root, internal haemorrhoids were continually peeled along the internal sphincter surface. Haemorrhoids were excised between 0.3 and 0.5 cm from the ligation line, and the treatment was finished after enough haemostasis was achieved. Postoperative care was the same for both groups.

The distal sphincter was dissected after the internal sphincter was separated from the mucosa immediately below the dentate line using an open technique called lateral internal sphincterotomy, which was performed in a lithotomy posture. From a 1 cm incision, a groove was investigated in the left posterolateral aspect. A abrupt give was felt when the sphincter's fibres were split. Additionally, sphincter abnormalities at the division site were palpated to confirm division. 400 mg of metronidazole and 1 g of ceftriaxone were administered intravenously to each participant. Following surgery, all participants had sitz baths for ten days, laxatives for two to four weeks, and antibiotics for five to seven days. All participants were urged to limit their intake of fried and spicy meals and were encouraged to drink plenty of water and high-fiber foods. Following surgery, all participants were monitored for one week and one month. They were questioned on pain management, bleeding, mucous discharge, and incontinence. The anus was examined for ulcer healing as well. The subjects were questioned about mucous discharge and anal incontinence.

At the end of the month after surgery, subjects who had no complaints were asked to report if their symptoms returned. Up to nine months might pass before subjects with ulcers, problems, or persistent symptoms were further recalled. SPSS (Statistical Package for the Social Sciences) software version 16.0 (SPSS Inc., Chicago, USA) was used to statistically analyse the collected data and evaluate descriptive metrics. The findings were presented as frequency, percentages, mean, and standard deviation. Statistical significance was defined as a p-value of less than 0.05.

RESULTS

Comparatively evaluating postoperative discomfort in patients treated with open (Milligan Morgan) haemorrhoidectomy with and without LIS (Lateral Internal Sphincterectomy) was the goal of the current prospective observational research.

Group I included of 100 participants aged 20 years or older who had Milligan Morgan haemorrhoidectomy with LIS, while Group II consisted of 100 participants without LIS. In the current study, there were 42% (n=84) females and 58% (n=116) men, with a male to female ratio of 1.38:1. The research participants in Groups I and II had mean ages of 44±5.4 and 43±6.2 years, respectively, which were not statistically significant. In Group I, the male-to-female ratio was 1.32; in Group II, it was 1.34. In Groups I and II, the average duration of symptoms was 34.2±6.8 and 32.2±9.2 months, respectively, and this

difference was not statistically significant. At one week, 74% (n=74) and 56% (n=56) of the participants in Group I and II, respectively, reported feeling less pain.

With p=0.84, this was statistically not significant. Ninety-four percent (n=94) and seventy-six percent (n=76) of the individuals in Group I and II reported pain alleviation at one month, which was statistically non-significant (p=0.87). 6% (n=6) and 10% (n=10) of Group I and II individuals, respectively, experienced mild urine incontinence at one month (p=0.73), and 2% (n=2) and 6% (n=6) at six months (p=0.55). According to Table 1, urinary retention was observed in 12% (n=12) and 30% (n=30) of the patients in Group I and II, respectively. This was not statistically significant (p=0.64). There were no postoperative problems reported by any of the subjects. On the sixth postoperative day, six LIS participants complained of some discomfort and drainage. The clinical judgement led to a suspicion of infection.

By switching from oral antibiotics to intravenous metronidazole and ceftriaxone, the infection was managed. The follow-up period averaged six months. After one and a half months, one Group II participant reported feeling less discomfort. After a month, 96% (n=96) and 66% (n=66) of the individuals in Group I and II, respectively, showed signs of ulcer healing. At three months, 6% (n=6) and 2% (n=2) of the participants in Group I and II, respectively, had mild incontinence with mucous discharge. The observed change, however, was not statistically significant. rather 2% (n=2) of the participants in Group I had true faecal incontinence, and even then, it was rather mild. Incontinence was shown to be gradually improving in a small number of participants who were monitored until the end.

DISCUSSION

In this study, 100 participants aged 20 years or older who had Milligan Morgan haemorrhoidectomy with LIS in Group I and another 100 participants without LIS in Group II were evaluated. In the current study, there were 42% (n=84) females and 58% (n=116) men, with a male to female ratio of 1.38:1. The current research's design was comparable to those of studies conducted by Toyonaga T et al. (2006) and Herold A et al. (2000), in which the authors used a similar study strategy for their haemorrhoidectomy patients. According to demographic data, the research participants in Groups I and II had mean ages of 44±5.4 and 43±6.2 years, respectively, which were not statistically significant.

In Group I, the male-to-female ratio was 1.32; in Group II, it was 1.34. In Groups I and II, the average duration of symptoms was 34.2±6.8 and 32.2±9.2 months, respectively, and this difference was not statistically significant. At one week, 74% (n=74) and 56% (n=56) of the individuals in Group I and II, respectively, reported feeling less pain, which was statistically not significant (p=0.84). Ninety-four percent (n=94) and seventy-six percent (n=76) of the individuals in Group I and II reported pain alleviation at one month, which was statistically non-significant (p=0.87). 6% (n=6) and 10% (n=10) of Group I and II individuals, respectively, experienced mild urine incontinence at one month (p=0.73), and 2% (n=2) and 6% (n=6) at six months (p=0.55).

Twelve percent (n=12) and thirty percent (n=30) of the individuals in Group I and II, respectively, had urinary retention, which was not statistically significant (p=0.64). These findings were similar to those of studies conducted in 2007 by Jayaraman S et al. and Lomanto D et al., in which the authors evaluated patients undergoing haemorrhoidectomy with demographic information similar to that of the research participants. According to the study's findings, none of the participants experienced any postoperative problems. On the sixth postoperative day, six LIS participants complained of some discomfort and drainage. The clinical judgement led to a suspicion of infection.

By switching from oral antibiotics to intravenous metronidazole and ceftriaxone, the infection was managed. The follow-up period averaged six months. After one and a half months, one Group II participant reported feeling less discomfort. These findings aligned with those of Fueglistaler P et al. (2006) and Graviè JF et al. (2005), who observed comparable issues to the current study in their separate investigations.

After a month, 96% (n=96) and 66% (n=66) of the individuals in Group I and II, respectively, showed signs of ulcer healing. At three months, 6% (n=6) and 2% (n=2) of the participants in Group I and II, respectively, had mild incontinence with mucous discharge. The observed change, however, was not statistically significant. rather 2% (n=2) of the participants in Group I had true faecal incontinence, and even then, it was rather mild. Incontinence was shown to be gradually improving in a small number of participants who were monitored until the end. These results were consistent with those of studies conducted by Kanellos I et al. in 2006 and Lan P et al. in 2006, where the authors also reported findings resembling those of the current research.

CONCLUSION

Taking into account its limitations, the current study comes to the conclusion that, in terms of fewer complications and long-term pain alleviation, Miligan-morgan haemorrhoidectomy with LIS is a more successful surgical method than Miligan-morgan haemorrhoidectomy without LIS. For a conclusive result, more longitudinal studies with bigger sample sizes and longer monitoring are required.

REFERENCES

1. Riss S, Weiser FA, Schwameis K, Riss T, Mittlbck M, Steiner G, Stift A. The prevalence of hemorrhoids in adults. Int J Colorectal Dis. 2012;27:215–20.
2. YH Ho, F Sew-Choen, C Tsang, KW Fu. A randomized trial assessing anal sphincter injuries after stapled haemorrhoidectomy. Br J Surg. 2001;88:1449–55.
3. Wasvary HJ, Hain J, Mosed-Vogel M. et al. Randomized, prospective, double-blind, placebo–controlled trial of effects of nitroglycerine ointment on pain after hemorrhoidectomy. Dis. Colon Rectum. 2001;44:1069-73.
4. Khubchandani IT. Internal sphincterotomy with hemorrhoidectomy does not relieve pain: a prospective randomized study. Dis. Colon Rectum. 2002;45:1452-7.
5. Kanellos I, Zacharakis E, Christoforidis E, Angelopoulos S, Kanellos D, Pramateftakis MG, Betsis D. Usefulness of lateral internal sphincterotomy in reducing postoperative pain after open hemorrhoidectomy. World J. Surg. 2005;29:464-8.
6. Toyonaga T, Matsushima M, Sogawa N, Jiang SF, Matsumura N, Shimojima Y, Tanaka Y, Suzuki K, Masuda J, Tanaka M. Postoperative urinary retention after surgery for benign anorectal disease: potential risk factors and strategy for prevention. Int J Colorectal Surg. 2006;21:676–82.
7. Herold A, Kirsch JJ. Pain after stapled haemorrhoidectomy. Lancet. 2000;356:2187.
8. Jayaraman S, Colquhoun PH, Malthaner RA. Stapled haemorrhoidopexy is associated with a higher long-term recurrence rate of internal hemorrhoids compared with conventional excisional hemorrhoid surgery. Dis Colon Rectum. 2007;50:1297–305.
9. Lomanto D, Katara AN. Stapled haemorrhoidopexy for prolapsed hemorrhoids: short and long term experience. Asian J Surg. 2007;30:29–33.
10. Fueglistaler P, Guenin MO, Montali I, Kern B, Peterli R, Von Flüe M, Ackermann C. Long-term results after stapled haemorrhoidopexy: high patient satisfaction despite frequent postoperative symptoms. Dis Colon Rectum. 2006;50:204–12.
11. Graviè JF, Lehur PA, Huten N, Papillon M, Fantoli M, Descottes B, Pessaux P, Arnaud JP. Stapled haemorrhoidopexy versus Milligan Morgan haemorrhoidectomy. Ann Surg. 2005;242:29–35.
12. Kanellos I, Zacharakis E, D Kanellos, Pramateftakis MG, Tsachalis T, Betsis D. Long-term results after stapled haemorrhoidopexy for third-degree hemorrhoids. Tech Coloproctol. 2006;10:47–4.
13. Lan P, Wu X, Zhou X, Wang J, Zhang L. The safety and efficacy of stapled haemorrhoidectomy in the treatment of hemorrhoids: a systematic review and meta-analysis of ten randomized control trials. Int J Colorectal Dis. 2006;21:172–8.

S. No	Parameter	Group I		Group II		p-value
		n=100	%	n=100	%	
1.	**Mean age (years)**	44±5.4		43±6.2		-
2.	**Male female ratio**	1.32		1.34		-
3.	**Mean symptom duration (months)**	34.2±6.8		32.2±9.2		-
4.	**Pain relief**					
a)	1 week	74	74	56	56	0.84
b)	1 month	94	94	76	76	0.87
5.	**Minor incontinence**					
a)	1 month	6	6	10	10	0.73
b)	6 months	2	2	6	6	0.55
6.	**Urinary retention**	12	12	30	30	0.64

Table 1: Study parameters in two groups of study subjects