



To evaluate the effectiveness of lateral sphincterotomy with haemorrhoidectomy in post operative haemorrhoidectomy pain and wound healing

Authors

Dr P. Hima Bindu¹, Dr K. Spoorthy²

¹Assistant Professor, SV Medical College, Tirupathi, ²Senior Resident

Introduction

Hemorrhoids are normal vascular structures in the anal canal. However, they are often the source of a variety of problems. The cardinal features of hemorrhoidal disease include bleeding, anal pruritus, prolapse, and pain due to thrombosis.

The incidence of haemorrhoids increases with age and it seems likely that at least 50% of people over the age of 50years have some degree of haemorrhoid formation. Men seem to be affected roughly twice as frequently as women.

Every therapeutic modality has advantage and disadvantage. Pain after haemorrhoid surgery remains one of the most important patient complaints. our study is aimed to evaluate the role of lateral sphincterotomy along with haemorrhoidectomy in reducing the post operative pain and related complications.^[6]

Aims & Objectives

To evaluate the role of lateral sphincterotomy along with haemorrhoidectomy with respect to, pain relief, urinary retention, comfort of defecation, continence, healing of wound of haemorrhoids.

Methodology

Study group comprises of patients with complains of bleeding per rectum and on examination diagnosed to be having grade III & IV haemorrhoids .Patients are selected from Outpatient department of General Surgery at Government Hospital, Government Medical College, Kadapa. Follow up of patients after treatment is done by history, per rectal examination and Proctoscopy to assess patients response and rate of complications like pain, retention of urine, continence, healing of wound.

Sample Size

Randomized 120 patients who were diagnosed to be having Grade, III & IV Internal haemorrhoids between the periods of December 2018 to December 2019 into 2 Groups

Study Group: 60 patients were subjected to open haemorrhoidectomy (Milligon & Morgon haemorrhoidectomy) with lateral sphincterotomy. [MMH+LH]

Comparative Group: 60 patients were subjected to open haemorrhoidectomy without lateral sphincterotomy. [MMH]

Inclusion Criteria

All patients who were diagnosed to be having GradeIII & IV haemorrhoids.

Exclusion Criteria

Patients who are having grade 1 and II haemorrhoids with associated fissures, fistula in ano & previous haemorrhoidal surgery.

Follow up- Done for 6 Weeks

The patients were followed upto 6 weeks after surgery by defined guidelines in order to detect any complications attributed to operation also to assess patients well being.

Pain as a main post operative complaint in our patients was determined using visual analogue pain scale. Score ranges from 0 to 10. A score of >7 is considered as severe pain, a score between 4

and 7 is moderate pain and a score <4 is mild pain.

Results

At the end of 1 week fecal incontinence was complained in 5% of patients in MMH and 6% in MMH+LS, where as gas incontinence was complained in MMH and 10% patients in MMH+LS group. By the end of 1-2 weeks the continence of both groups have improved and no patient has complained of incontinence.

The results are shown in the below table.

Present study

Surgery	Urinary retention	Fecal incontinence	Gas Incontinence	Wound Infection	Recurrence	Stenosis
MMH	20	3	4	0	0	0
MMH + LS	3	4	6	0	0	0

Archives of Iranian Medicine, Volume 10 (Seyed Vahid Hosseini MD)^[8]

	Urinary retention	Fecal incontinence	Gas Incontinence	Wound Infection	Recurrence	Stenosis
MMH	30	4	8	4	1	1
MMH+ LS	13	6	10	4	0	0

Post operative complications were compared with study done by Seyed Vahid Hosseini MD. Results are almost similar in both studies.

Table of pain in IJGE Issue 4th Volume 1 2003 in 200 Patients (Safwan A T Aha)^[3,4]

Pain On Day 0 Post Operatively

	MMH	MMH + LS
Mild Pain	48 (48%)	81(81%)
Moderate Pain	34 (34%)	17 (17%)
Severe Pain	18 (18%)	2 (2%)

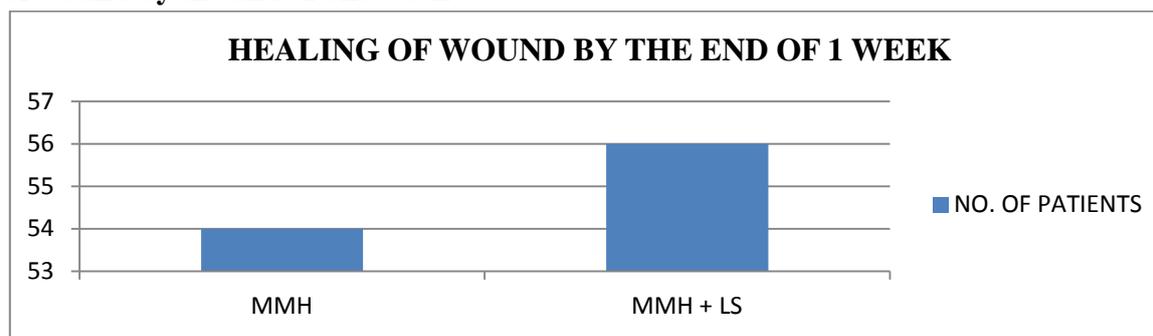
Present Study**Pain On Day 0 Post Operatively**

	MMH	MMH + LS
MILD PAIN	24 (40%)	48(80%)
MODERATE PAIN	18 (30%)	9 (15%)
SEVERE PAIN	18 (30%)	3 (5%)

Results of postoperative pain were compared with that of the study done by Safwan A Taha which were comparable. In the study done by Safwan A

Taha, 48% of MMH group had mild pain on day0 of surgery in contrast 81% of MMH+LS group have mild pain on day 0 of surgery.

Healing of wound by the end of one week



In groups >90% of patients have their wounds healed by the end of 1 week

Discussion

During the study, 120 consecutive patients with third and fourth degree haemorrhoids were prospectively randomized for Milligan-Morgan procedure (MMH) and MMH+LS. These patients were examined at one, two, and six weeks after the operation. All patients had a lower gastrointestinal investigations prior to operation to exclude other colorectal pathologies. All patients had the same kind of preoperative preparation and analgesia during the postoperative course. Pain satisfaction was assessed using a visual analog scale from 0 to 10. Patient satisfaction was defined as decrease or absence of symptoms and return to normally daily activities. MMH groups included 60 patients, while the MMH+LS group had 60 patients. There is no difference between the groups in terms of age, gender, haemorrhoidal degree and difference between the groups were similar. Significant difference was noted in the overall amount of analgesics used in the two groups at week 1. Das *et al.*^[14] evaluated 50 patients (38 male, 12 female) aged between 24 and 50 years who were treated for 3rd and 4th degree hemorrhoids in a prospective randomized study. Patients were randomly divided into two equal groups. Group I (control group) were subjected to classical open hemorrhoidectomy and Group II (study group) were subjected to classical open hemorrhoidectomy along with a lateral internal sphincterotomy. They concluded that internal sphincterotomy can be safely added to hemorrhoidectomy, especially for younger

patients to reduce the agonizing postoperative pain and associated complications.

A study by Galizia *et al.*^[1] evaluated 42 consecutive patients with prolapsed pile. Forty-two patients were randomized: Group I ($n = 22$) patients underwent hemorrhoidectomy plus lateral internal sphincterotomy; Group II ($n = 20$) patients underwent hemorrhoidectomy alone justified by anorectal manometry. The study concluded that the addition of lateral internal sphincterotomy to hemorrhoidectomy seems to improve postoperative course related to symptoms of postoperative pain and associated complications.

Kanellos *et al.*^[5] evaluated 78 patients with 4th degree hemorrhoids and were divided into two groups. Patients from Group I underwent Milligan-Morgan hemorrhoidectomy. Patients from Group II, quite apart from Milligan-Morgan hemorrhoidectomy, underwent lateral internal sphincterotomy up to the dentate line. The results of the study showed that after the first bowel movement, there were 3 (7.7%) patients who did not experience any pain in the internal sphincterotomy group, while in the noninternal sphincterotomy group, all patients experienced mild or moderate pain.

Diana *et al.*^[10] studied 699 patients with II Grade, III Grade, IV Grade hemorrhoids with 16, 464, and 219 patients, respectively, and found that lateral internal sphincterotomy reduces pain significantly only in the first postoperative period, but not in the medium- and long-term follow-up.

Conclusion

Study group who underwent Haemorrhoidectomy with lateral sphincterotomy (MMH+LS) group has significantly decreased post operative pain when compared to Haemorrhoidectomy (MMH) group. To conclude addition of internal sphincterotomy to open hemorrhoidectomy is an effective method to reduce post open hemorrhoidectomy pain, complications as well as reduce the duration of complete wound healing without any significant morbidity.

References

1. Galizia G, Lieto E, Castellano P, Pelosio L, Imperatore V and Pignatelli C. Lateral internal sphincterotomy together with hemorrhoidectomy for treatment of haemorrhoids: a randomised prospective study. *European Journal of Surgery*, 2000; 21:127-34
2. Chen W S, Leu S Y and Wang, F M. The roles of haemorrhoidectomy and lateral internal sphincterotomy in the treatment of haemorrhoids- clinical and manometric study, 1989 Apr;43:255-60
3. Routine Internal Sphincterotomy IJGE Issue 4 V ol 1 2003 Surgery . *Surgery of the colon, Rectum & Anus*. Fifth edition. Butterworth Heinemann Ltd, 1993; 789-796.
4. Safwan A.Taha. A New modification for closure of haemorrhoidectomy wounds. *Basrah J Surg.*, March, 7, 2001; 2
5. Kanellos, Zacharakis E, Christoforidis E, Angelopoulos S, Kanellos D, Pramateftakis MG, et al. Usefulness of lateral internal sphincterotomy in reducing postoperative pain after open haemorrhoidectomy. *World J Surg* 2005;29:464-8.
6. Corno F, Muratore A, Mistrangelo M, Nigre I, Capuzzi P. Complications of the surgical treatment of haemorrhoids and it's therapy. *Ann Ital Chir* 1995; 66(6): 813.
7. 405Archives of Iranian Medicine, Volume 10, Number 4, October 2007
8. Das DK, Choudhury UC, Lim ZS. Effectiveness of internal sphincterotomy in reducing post open haemorrhoidectomy pain: A randomized comparative clinical study. *int J Collab Res Intern Med Public Health* 2013;5:428-33.
9. Diana G , Guercio G, Cudia B ,Ricotta C. Internal sphincterotomy reduces postoperative pain after milligan morghan haemorrhoidectomy. *BMC Surg* 2009;9:16.