
HAEMORRHOIDECTOMY... A NEW MODIFICATION

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Summary

This is a prospective study designed for the evaluation of the results of a modified surgical technique for the treatment of third and fourth degree hemorrhoids in comparison with the classical Milligan Morgan procedure. It was conducted during the period from January 1996 to January 2002 at Alzahrawi Hospital in Mosul. Three hundred ninety-five patients with third and fourth degree hemorrhoids were randomized into two groups, the first one included 200 patients (120 male and 80 female), they were operated upon by our modified surgical technique, while the second group included 195 patients (110 male and 85 female), they were operated upon using Milligan Morgan procedure. Both groups had the same age sex distribution and clinical presentation. The same pre and postoperative care was applied to both groups, as well as the type of anesthesia and operative position. The early and late postoperative complications and follow-up were recorded and compared. It is concluded that the modified surgical technique that we used for third and fourth degree hemorrhoids gave less early and post operative complications, there were shorter convalescence period and hospitalization, with shorter healing time, and we advocate it for the treatment of third and fourth degree hemorrhoids.

Introduction

Haemorrhoids is a common anal condition¹, it represents 72% of all anal pathologies², it is recorded that, 50% of western population aged more than 50 years will have haemorrhoids to some extent³.

Clinically, haemorrhoids divided into 4 degrees depending on the advance of anal mucosal prolapse⁴, for the third and fourth degree, surgery is the treatment of choice till now.

Many surgical procedures and various

modifications has been adopted for the treatment of hemorrhoids⁵, the aim is to achieve low recurrence rate, less post operative complications, and less sick leave and hospitalization.

The most widely practiced operation for third and fourth degree hemorrhoids is the dissection - ligation operation which was produced by M-Morgan and modified by Houley in 1973⁶. In our procedure, we sutured the anal mucosa to the anal verge skin, after excision of the hemorrhoidal pedicle with out packing the anal canal, trying to achieve better results.

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Patients and Methods

During a period of six years (1996 to 2002), three hundred ninety-five patients complained of third and fourth degree hemorrhoids were diagnosed on clinical basis, and treated surgically. The patients were divided into two groups, there were no deference regarding the average age, sex, or complaints, it was the same preoperative principles and postoperative care that applied to all patients.

All patients with acute complications of hemorrhoids, or had had previous hemorrhoidectomy were excluded from the study.

The first group includes 200 patients (120 males and 80 females), they were subjected to a modified surgical procedure during which, the haemorrhoids grasped by forceps at the mucocutaneous junction where a curve incision done, the wound deepened to the submucosal space after cutting the corrugator cutis ani muscle fibers, and sparing the fibers of anal sphincter, with less possible cut in the mucosal side, the hemorrhoidal pedicle then lifted off its bed, transfixed and excised, hemostases at the bed secured by electrocauterization. The edge of the mucous membrane then sutured to the skin of the anal verge by running sutures using 00-cat gut, local xylocaine jelly applied to the anus, no anal packing was performed, but a gauze supported by plaster applied to the anal verge.

The second group includes 195 patients (110 males and 85 females) were treated by dissection-transfixion and ligation method of their haemorrhoids, leaving a triangular shape row area at each site of excision (clover shaped wound), with the insertion of anal pack at the end of the operation.

The pre operative preparation involved, night enema, bath, fasting for 8 hours, no shaving of the anal hair was requested for male, female should not be in menses at time of operation. We

employed general anesthesia in lithotomy position, starting operating by gentle anal dilation.

The postoperative care includes complete bed rest in supine position for 6-12 hours, analgesia in form of diclofenac 75 mg intramuscularly, or pethidine 100 mg when the pain is so severe (decided by doctor), no intravenous fluid was given to any patients, oral antibiotics, in form of cephalexin 500 mg q.d.s, and metronidazole 500 mg t.d.s, were prescribed for 5 days. The dressing removed after 8 to 12 hours in the first group and 12 to 24 hours in the second group, allowing them for sitz bath several times a day with local xylocaine jelly application several times a day for one week, no laxative were used.

All patients were evaluated 1 week, 1 month, and 3 months post operatively; the early and late postoperative follow up and complications were recorded and compared.

Results

The numbers of the patients, ages and sex shown in Table I.

No. of groups	No. of patients	Sex		Age	
		M	F	Mean	Range
Group 1	200	120	80	36	20-60
Group 2	195	110	85	33.5	19-62

Although almost all patients in both groups received intra-muscular injection of diclofenac 75 mg postoperatively, the post operative pain appeared to be less in the first group depending on doctor assessment, those who did not respond to analgesia, narcotic agent in form of pethidine 100 mg intra-muscular injection was prescribed. There were 25 patients in the first group and 44 patients in the second group who needed such medication.

The post operative urge desire for defecation were detected in 15 patients

in the first group, and in 98 patients in the second group, this feeling did not disappear until the removal of the anal pack.

The early postoperative complications (complications that happened with in 72 hours post operatively) in the form of, bleeding, retention of urine, and abscess formation were shown in Table 2.

Table II. The early postoperative complications

No. of groups	No. of patients	Bleeding	Urine retention	Abscess
Group 1	200	0	0	1
Group 2	195	4	5	3

The late post operative complications (complications happened after 3 to 6 months post operatively) in the form of anal stricture, fissure, and skin tag were shown in Table III.

Table III. The late postoperative complication.

No. of groups	Fissure	Stricture	Skin tag
Group 1	0	1	2
Group 2	7	3	10

There were no recurrences of haemorrhoids, neither stool incontinence in both groups.

Hospitalizations for more than 24 hours were needed in 17 patients in the first group and in 30 in the second group, the causes of hospitalization shown in Table IV.

Table IV. The indication for over night hospitalization.

No. of groups	Overnight hospitalization	Indications		
		Pain	Complication	Faraway home
Group 1	17	4	0	13
Group 2	30	12	3	15

Discussion

Many surgical procedures have been successfully treated third and fourth

degree haemorrhoids, but no one was immune from criticism, this potentiate us to modify the classical haemorrhoidectomy operation which transfix and excise the haemorrhoids leaving a triangular row area behind to heal by granulation tissue, which is definitely needs daily dressing, and long time for complete healing (4 to 6 weeks)⁷. Anal stricture and subsequent fissure in ano still happened because of healing of the wound by fibrosis⁸.

To eliminate the risk of fibrosis, submucosal haemorrhoidectomy was performed (closed operation), which needs special proctoscope to expose the haemorrhoids, in this type of surgery, the mucosa incised to expose the haemorrhoidal pedicle, which transfixed and excised, then the mucosa resutured, this way who ever, is difficult technically, and may result in some blood loss⁹.

Recently the use of circular stapler for excision and suturing of advanced hemorrhoids showed no short-term complications, and less pain, but the procedure needs further evaluation¹⁰.

The post operative bleeding, which may happen in 1.3% after haemorrhoidectomy in the classical way¹¹ was reduced to zero percent in our study, which may be due to closer of the row area over a hemostatically controlled bed which support the tissues and press on it.

Urinary retention after anal operation is not a rare complication⁷; it may be due to bladder dysfunction as results of sever pain¹². We believe that, post haemorrhoidectomy pain, is largely resulted from the use of the anal packing, since we avoid the use of it in the first group patients, this group felt less pain, anal disconcert and urge desire to defecate post operatively and they needed less narcotics to control pain at the same time, no urine retention was recorded in comparison with 5 cases in the second group.

Since there is no anal pack inserted in the first group patients, early application of xylocaine jelly and sitz bath can be done (6 to 8 hours postoperatively), which proved to decrease postoperative pain and urine retention¹³.

There were only 17 admission for more than 24 hours in the first group because of less postoperative pain and less early post operative complication in comparison with 30 admissions in the second group, which is surly decrease the burden on the hospital and the cost.

Conclusion

Our modification for the treatment of third and fourth degree haemorrhoids by resuturing of the anal mucosa to the anal verge skin after excision of the haemorrhoids without insertion of the anal pack, was achieved better results than the standard operation, in the form of, less post operative pain, less early and late postoperative complications, with less convalescent period and hospitalization. We recommend its use for the treatment of third and forth degree haemorrhoids.

References

1. Thomson WHF. The nature of hemorrhoids. *Br J Sur* 1975; 62:542.
2. Houly PH, Hins MO. Analyses of two thousands consecutive proctologic examinations. *South Med J* 1956; 49:475.
3. Hemorrhoids. In: Mosby. *Clinical gastroenterology*. CD ROM. Digital Direct Ltd 1996.
4. Buls G, Goldberg SM. Modern management of hemorrhoids. *Surg Clin North Am* 1978; 58:469.
5. Farquson JA, Mazier WP, Ganchrow MI, Frind WG. The closed technique of hemorrhoidectomy. *Surgery* 1970; 70:480.
6. Haully PR. Hemorrhoids. In : Tylor S, Resent advance in surgery 8th ED. Churchill Living Stone, Edinburgh 1973, 294.
7. Corono F, Muaore A, Mictrangelo M, Nigra I. Hemorrhoids and its therapy. *Ann Ital Gir* 1995 Nov-Dec; 60(6): 813-6.
8. Hemorrhoids. In: Short practice of surgery. Baily and Love 18th Ed. H.K Lewis and CO. London 1988, 1095.
9. Dudley H, Johaston J, Ritoul R. Operation in rectum and anal canal. In: Farquharson text book of operative surgery 7th Ed, Churchill Living Stone, 1986, 470.
10. Roveron A, Susa A, Paterguani M. Circular stapler for treatment of advanced forth degree hemorrhoids. *G Gir* 1998 May; 19(5) 230-90.
11. Ganchrow MI, Mazierw P, Frind WG, Ferguson JA. Hemorrhoidectomy revisited- a computer analyses of 2,038 cases. *Dis Colon Rectum* 1971; 14:128.
12. Baily HR; Ferguson JA. Prevention of urinary retention by fluid restriction following anorectal operation. *Dis Colon Rectum* 1976; 19:250.
13. Jiono JK, Chin JH, Lin JK. Local thermal stimulation relaxes hypertonic anal sphincter: evidence of somato anal reflex. *Dis Colon Rectum* 1999 Sep; 42(9): 1153-9.