

Haemorrhoidectomy

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ABSTRACT

Introduction

Haemorrhoids are among the commonest surgical problems of anorectal region.

Chronic constipation, straining, at defecation or micturation is the main predisposing factors but exact aetiopathogenesis remain unclear.

Most patients in the initial stages are treated with conservative or minimally invasive approaches. However haemorrhoidectomy has proven long-term efficacy in the treatment of third degree haemorrhoids. There is still controversy whether open or closed haemorrhoidectomy is treatment of choice. Haemorrhoidectomy whether open or closed is associated with postoperative complications.

This study was carried out to compare postoperative complications of both procedures to improve the management of haemorrhoids.

Objectives: To compare postoperative complications in open and closed haemorrhoidectomy.

Study Design: Quasi- experimental.

Settings: Surgical unit-1, Allied Hospital Faisalabad.

Duration: One year (20/06/06 to 20/06/07).

Sample size: 100 cases (50 cases in each)

Sampling technique: Convenience sampling.

Inclusion criteria: Patients with 3rd degree haemorrhoids.

Exclusion criteria:

- › Complicated third degree haemorrhoids.
- › Patients with other causes of bleeding per rectum.
- › Patients having associated medical problems.
- › Patients not willing for surgery.

Results: Out of 100 patients 7 had severe postoperative pain, 5 from open and 2 from close group. 50 patients had moderate pain, 30 from open and 20 from closed group. 8 patients, 5 from open and 3 from closed group got urinary retention. 2 patients both from open group had anal stricture.

Conclusion: Closed haemorrhoidectomy is more advantageous with respect to less postoperative pain.

Key Words: Haemorrhoidectomy, Haemorrhoids, complications of haemorrhoidectomy.

INTRODUCTION

Haemorrhoids are dilatations of internal venous plexus with an enlarged, displaced anal cushions[1]. They are among the commonest ailments of the anorectal region. Haemorrhoids may be primary occurring at 3,7,11, O Clock positions according to the distribution of right and left branch of superior rectal vein or secondary occurring in between these three sites[2].

Not only the adults but people of all ages even the very young are affected. Chronic constipation, straining at defecation or micturation are main predisposing factors but exact aetiopathogenesis remains unclear, most arguments are in favour of progressive degeneration of fibro-muscular structures of internal haemorrhoidal plexus responsible for prolapse in anal canal[3]. Incidence of haemorrhoids increase s with age. At least 50% of

symptoms and degree of haemorrhoids. Diet modification is useful adjunct in all degrees of haemorrhoids.

Most of these procedures are performed as outpatients procedure and some carried out as in patient under anesthesia, are less time consuming and more acceptable for the patients. Among these sclerotherapy, rubber band ligation, lord's procedure, cryosurgery, laser technique and haemorrhoidectomy are commonly employed techniques. The aim of a perfect technique is its simplicity, and cost effectiveness. Operative treatment has been the method of choice in dealing with the third degree haemorrhoids. Haemorrhoidectomy is an operation that benefits the patients considerably and should not be withheld if the patients have troublesome symptoms. Surgeons have been treating the condition for many centuries. Shyness and fear of surgery are the

main reasons of avoiding medical treatment.[5] Prolonged hospitalization is another disadvantage of conventional haemorrhoidectomy leading to decreased turnover of patients complication such as severe postoperative pain, urinary retention, immediate, secondary and reactionary hemorrhage, anal stenosis or stricture are the common sequelae of haemorrhoidectomy.[6] Severity of postoperative pain and other complications forced many researchers to add various modification in the standard or traditional technique of haemorrhoidectomy but none has gained the wide acceptance, thus strengthening the view of avoidance of haemorrhoidectomy as far as possible.[7] Recognition of the problems associated with haemorrhoidectomy have not only been a powerful stimulus to surgeons in introducing various modifications of technique of this operation but also to evolve non-operative and short day case modalities of treatment of haemorrhoidal disease Today outpatients and day case procedures are gaining much more popularity, because they are believed to be simple, economical and complication free.

In a society like ours where the disease is much prevalent and most of the patients belong to lower socio-economic class, the patient's compliance relate to shorter hospitalization, less morbidity, early return to work and absence of unbearable pain. Therefore keeping in view the above-mentioned factors and international changing trends in the treatments of hemorrhoids, it was planned to carry out a clinical research trial to compare two-haemorrhoidectomy procedures i.e. conventional haemorrhoidectomy and sub mucous haemorrhoidectomy for the patients with 3rd degree hemorrhoids. The purpose of this comparative study is to find out the most successful and rather complication free operation for the symptomatic relief of patients with hemorrhoids.

OBJECTIVE

The objective of this comparative study to compare early and late post-operative complications in open and closed haemorrhoidectomy in adults.

Hypothesis: Closed haemorrhoidectomy is associated with less postoperative complications.

MATERIAL AND METHODS

Setting: Surgical unit –1 Allied hospital Faisalabad.

Duration of study: One year (20.6.2006 to 20.6.2007)

Sample size: 100 cases (50 in each group)

Sampling Technique: Convenience sampling. Allocation to two groups was done by simple random (lottery) method.

SAMPLE SELECTION:

Inclusion criteria:

Patients of 30-60 years age with third degree uncomplicated haemorrhoids.

Exclusion Criteria

- Complicated third degree haemorrhoids
- Patients with other causes of bleeding per rectum like carcinoma rectum.
- Patients with associated with medical problems like chronic liver disease, diabetes mellitus, chronic renal failure, and ischemic heart disuse.
- Patients not willing for surgery.

Study design: Quasi-experimental study

DATA COLLECTION

Selection of Patients

The study was conducted in department of General Surgery Unit 1 Allied Hospital Faisalabad during the period 20 June 2006 to 20 June 2007.

The patients with symptomatic 3rd degree haemorrhoids were initially assessed and then admitted from the outpatient department. These patients were subjected to conventional and submucous haemorrhoidectomy on alternate basis after distributing them into 2 equal groups. The total number of patients included in the study was 100. Each group comprised of 50 patients. Patients of either group were operated upon on alternate basis. Patients of either sex were included in this trial. Results, outcome, and merits/demerits of both these operations were finally analyzed, assessed, compared and discussed.

Surgical principles of various forms of haemorrhoid ectomy were as follows:

1. Complete removal of all the haemorrhoidal tissue.
2. Avoidance of anal stricture and stenosis.
3. Avoidance of anal incontinence by protecting the anal sphincters from injury by careful dissection.
4. Avoidance of any prolapse or eversion of the mucosa that would produce "weeping anus".
5. Avoidance of leaving skin tags by excising all the redundant anal skin.

METHODOLOGY

Preoperative preparation

Preoperative preparation was same for both operations. Patients were admitted one day or two days before the operation. All routine investigations including blood complete examination, urine complete examination, X-ray chest, ECG, Blood sugar were done. Detailed and careful ano-rectal and proctoscopic examination was done to confirm, the disease, degree, and size of prolapse. Sigmoidoscopy was done to exclude any other pathology higher up in the rectum and sigmoid colon. Sometimes barium enema and colonoscopy were also indicated and were performed preoperatively. Shaving of the perianal area was done a night before operation preoperatively and preparation for anaesthesia were made. Twenty four hours before the operation, laxative such as Biscodyl tablets 6 to 10 were given according to the built of the patient to unload the gut. Then 12 hours before the operation, the patient was given rectal washouts. During the twenty-four hours before the operation, the patient was kept on oral liquids till the midnight, after that he was kept nothing by mouth.

Conventional Haemorrhoidectomy

This operation was performed under general or spiral anesthesia in 50 patients. The operation was performed in lithotomy position with buttocks overhanging or projecting 2 inches beyond the edge of table.

After the preparation of peri-anal skin with pyodine and draping, the exposure of anal canal was made by application of gentle traction with the help of artery forceps to the skin at primary sites of haemorrhoids or the external component of the haemorrhoid. This exposed the so-called triangle of exposure corresponding with the three primary piles at 3, 7 and 11 o' clock positions. At this stage careful note was made of the selected area of skin and mucosa (muco-cutaneous bridges) that was to be left between each area of dissection to prevent postoperative anal stenosis.

Once the triangle of exposure had been achieved, dissection was started beginning with dissection of left lateral haemorrhoid. Haemorrhoids were then dissected after making a V-shaped or diamond shaped incision at the anal and peri-anal skin corresponding to the pile. The incision and dissection was continued till the white fibers of internal and sphincters were exposed. Then the pedicle of the haemorrhoid was isolated and "0" chromic catgut on a

curved needle was employed to ligate the vascular pedicle at its base. It was then resected distal to the suture with accompanying varices. The same technique was employed for the other two piles, taking special care of leaving the adequate (not less than 1 cm) muco-cutaneous bridges in between the excised haemorrhoids. The right anterior haemorrhoid is usually the smallest and easiest to eliminate and that is why it was dealt at the last. The anal wounds were examined in turn after achieving complete haemostasis and redundant skin tags were also carefully removed. At the end of operation, dressing of the wound was one with acri-paraffin soaked gauze and held in place with the help of T-bandage.

Submucous Haemorrhoidectomy

The preoperative preparation was the same as in case of conventional haemorrhoidectomy. This operation was performed under general or spiral anesthesia in Jack-knife position.

Procedure

The submucous and subcutaneous tissue overlying the pile was infiltrated with a solution of adrenaline 1: 100,000 to control bleeding and for better dissection. A longitudinal inverted racket shaped incision which started outside the anus was made in the coverings of haemorrhoids. Then mucosa was dissected and lifted off the haemorrhoidal tissue and also from sphincters. After the dissection had been completed and flaps of mucosa had been clearly separated and raised, the transfixion of the vascular pedicle was done with "0" chromic catgut. The excess of haemorrhoidal tissue was then excised. Each wound was carefully inspected prior to the repair of mucosa and achieved a complete haemostasis. The flaps of the mobilized mucosa were re-approximated with 2/0 vicryl, also incorporating the underlying internal sphincters in stitches to prevent the dislodgement of flaps during postoperative period. Each wound was inspected in turn and haemostasis was assured. A small part of skin incision was left upon for drainage. At the end of operation acri-paraffin soaked gauze dressing was applied externally and maintained in place with the help of T Bandage.

Postoperative Care

It was same after either procedure. Patient was kept nothing by mouth at least for 6-8 hours after the operation. During this period, patients were given intravenous fluids. After this period, he was instructed to take liquids orally. During the immediate postoperative period, when the patient had not yet

started to take orally, the postoperative pain was controlled by injectable analgesics such as intramuscular Diclofenac Sodium 75 mg according to the severity of pain and the demand of patient. On the day of operation, only injectable analgesia was given. On the first postoperative day, injectable analgesics were changed to oral analgesic like Diclofenac Sodium tablets 50 mg twice a day or 100 mg once a day or Ponstan tablets (Mefenamic acid) 500 mg thrice a day which were continued for the next few days until the patient was completely pain free. Dose was adjusted accordingly.

Patients were mobilized early and allowed to pass urine if required. Patients were prescribed stool softeners as liquid paraffin one or two teaspoon, twice or thrice a day, once the patient had started to take orally. This practice prevented the formation of hard stools and thus facilitated the first bowel movement. Pain with the first bowel movement was variable, depending on whether the stool was hard or soft. Thus early establishment of normal bowel habit was of the greatest help in preventing the chances of postoperative anal stenosis. Stool softeners or bulk laxatives were given and continued at least for 7-10 postoperative days for pain free bowel movements.

The dressing was left undisturbed till the first postoperative morning when it was changed and then changed after each defecation and then twice daily. Twice daily sitz's baths were started on the 1st postoperative day and then continued for 7 to 10 days for cleanliness and relief of discomfort and soreness. During the whole postoperative period, the patients were given high fiber diet with bran such as Isphagol to make the stools semisolid.

Patients were discharged from the hospital after they had opened the bowel once and also keeping in mind the satisfactory condition of the wound. At the time of discharge the patient was advised high roughage diet and was asked to revisit after 7-10 days for follow-up.

Follow-Up

Follow-ups were scheduled at two weeks, 4 weeks, 6 weeks, 8 weeks after the completion of treatment. On follow-up examination, all the patients were assessed and checked for subjective and objective improvement of symptoms and signs and development of any postoperative complication. While compiling results, the main emphasis was laid on subjective assessment because the main objective of the treatment was to abolish or reduce the symptoms

and check the efficacy of either procedure and also to improve the proctoscopic appearance.

On subjective assessment, inquiries were made regarding the pre and post-treatment symptom and complications. They were also asked about their opinion for the treatment received.

For objective assessment, inspection, digital rectal, proctoscopic examination was performed and findings were recorded in protocol proforma. Finally, the patient's initial records and final records were analyzed and compared with respect to various predisposing factors, inpatient management, postoperative analgesia, and different management complications.

Statistical Test Applied

The data was subjected to statistical analysis using Chi-Square(X^2) test. Percentages were also worked out to study differences in two operative procedures.

Statistical Analysis

Postoperative pain was the statistically significant complication. Five (10%) patients from open group and two patients (4%) from closed group suffered from severe pain, while thirty patients (60%) from open group and twenty patients (40%) from closed group had moderate pain. 15 patients (30%) from open and twenty eight (56%) from closed group had mild pain.

So

$$X^2 = 7.216$$

$$P < .05 = 5.97$$

There was no statistically significant difference in rest of complications in both procedures.

RESULTS

The results were considered as excellent, improved and a failure mainly on the subjective assessment (Table-1). For objective assessment inspection digital rectal, proctoscopic examination was done to see postoperative complications.

Results were declared excellent when the patients were completely symptoms free, improved when there was improvement but occasional persistence of symptom and failure when there was no change, or improvement at all in the symptoms after treatment. 100 patients were included in this study (50 in each group). In-group A, 34 (65%) patients were male and 16 (35%) were female and in-group B, there were 38 (76%) male and 12 (24%) female patients. Age of the patients

varied from 30 to 75 years with a mean age of 52.5 years. Male to Female ratio was 2.12:1 in-group A and 3.16:1 group B.

Table 1
Detail of patients in the trial

	Group A Conventional (open) haemorrhoidectomy	Group B Submucous(clo) haemorrhoidect
No. of patients	50	50
Total number of patients =100		

Table 2
Details of age and sex ratio of patients in the study.

	Group A	Group B
NO. of patients	50	50
Age Range	30-75 yrs	30-75 yrs
Mean age	52.5 years	52.5 years
Sex		
Male	34(65%)	38 (76%)
Female	16(35%)	12(24%)
M/ F ratio	2.12:1	3.16:1

POSTOPERATIVE COMPLICATIONS

Group A

1. *Pain*: postoperative pain was graded as mild, moderate and severe on 3 basis.
 - i)- Subjective feeling of patient as mild, moderate and severe
 - ii)- Amount of analgesia considering frequency and dose as demanded by the patient to become pain free.
 - iii)- By use of linear analog scale.

15(30%) patients complained of mild pain which was relieved by 1-2 ampoules of injectable analgesics like deep intramuscular Diclofenac sodium 75mg injection in first twenty four hours. 30(60%) patients complained of moderate amount of pain requiring 3-6 ampoules of 75mg of Diclofenac sodium in 24 hours and then oral analgesic later on.

5(10%) patients complained of server pain in postoperative period and required intramuscular Diclofenac sodium 75mg injection and opiates for 6-8 hours and then frequent oral analgesics like ponstan (Mefenamic acid 500mg) tablets twice or

thrice a day for 7-10 days for the relief of pain (Table 7, Fig.3).

2. *Haemorrhage*: - there was no case of early or late haemorrhage.
3. *Retention of urine*: - 5(10%) patients developed acute urinary retention after open haemorrhoidectomy. Retention of urine was more in patients who were given more I/V fluids during the operation and in aged male patients, patients receiving spinal anaesthesia, patients having severe pain and this was treated by catheterization.
4. *Anal stenosis*: - postoperative anal stenosis developed in 2(4%) patients both were from group A. This was due to extensive dissection leaving less intact mucocutaneous tissue. All these patients were having big haemorrhoids.
5. *Infection*: - Infection occurred in only one case, and it was cellulites.

Group B

(Sub mucous haemorrhoidectomy group)

1. *Pain*: - It was noted that in group B for submucous haemorrhoidectomy group, the pain was more server in the immediate postoperative period i.e. the first few postoperative hours and the first bowel movement was more painful as compared to conventional haemorrhoidectomy group. Subsequently the severity of pain reduced from moderate to mild to a great extent in the remaining postoperative period as compared with conventional haemorrhoidectomy. 28 (56%) patients complained of mild postoperative pain after this operation. They required only 1-2 ampoules of intramuscular Diclofenac sodium 75mg injections once or twice in first 24 hours. 20(40%) patients complained of moderate pain, which was relieved by injectable diclofenac sodium 75mg, 3-6 ampoules in first 24 hours and then oral analgesic such as ponstan (Mefenamic acid 500mg) tablets thrice a day for next 7-10 days. Two (4%) patients had very severs pain and they required strong analgesia and more dose was needed for their relief of pain.
2. *Haemorrhage*: In our study, no patients developed early or late haemorrhage.
3. *Retention of urine*: - 3 (6%) patients developed acute urinary retention exclusively in the male patients. This required catheterization.
4. *Infection/submucous abscess formation*:- cellulites in 4(8%) patients and submucous abscess in one patient.

Only in one patient, there was a formation of small submucous abscess which was treated simply by giving a small incision over the abscess and draining it and also advising the patients to keep the peri-anal area clean after each bowel movement and continue the sitz's bath regularly for few days.

5. Anal stenosis: - there was no case of anal stenosis in this group.

Table 3
Comparison of postoperative complications in two groups

Complications	Group A	Group B
Postoperative pain		
Mild	15(30%)	28(56%)
Moderate	30(60%)	20(40%)
Severe	5(10%)	2(4%)
Haemorrhage		
Early	0(0%)	0(0%)
Late	0(0%)	0(0%)
Urinary retention	5(10%)	3(6%)
Infection	1(2%)	4(8%)
Anal stenosis	2(4%)	0(0%)

DISCUSSION

The symptoms of Hemorrhoids have been recorded throughout history [8]. Surgeons have been treating this condition for many centuries; Ligation, excision and cauterization were being used by the Hippocrates who actually named the disease. Since that Hippocratic period, haemorrhoids have engaged the attention of surgeons but the great practical contribution of Salmon changed the whole pattern. He stressed the ligation of blood supply and pedicle of the haemorrhoid. Several modifications of Salmon's procedure were made. Two of them i.e. Miles (1919) and Milligan-Morgan gained popularity and as a result, ligation- excision has been used to virtual exclusion of others. Haemorrhoidectomy is associated with pain and open wound [9]. So the deviations from conventional haemorrhoidectomy were taken by many surgeons and some successful attempts to provide alternative to haemorrhoidectomy came in the literature like sclerotherapy, rubber band ligation, manual anal dilatation, cryosurgery, photocoagulation and diathermy coagulation. Even the laser technique

has been introduced in the treatment of haemorrhoids. The aim of a perfect technique is its simplicity and cost effectiveness. Moreover, there should be an uneventful and uncomplicated recovery in a shorter period of time. Thus the selection of a patient for a particular method of treatment should be done with due care and awareness.

The diagnosis of hemorrhoids can not be determined either by the history or examination alone. A carefully obtained detailed history and a thorough proctosigmoidoscopic examination are necessary.

A complete and successful haemorrhoidectomy with prevention of recurrence and early return to the physiologic function should be the goal of all the surgeons. Haemorrhoidectomy has the unfortunate reputation of being followed by an inordinate amount of postoperative pain. Recognition of this fact has been a powerful stimulus to the surgeons in introducing various modifications of the technique for this operation such as:

1. Excision with high ligation.
2. Excision with low ligation.
3. Excision with primary suture.
4. Submucosal excision.
5. Excision with clamp and cautery.

These various modifications have been described and tried by various researches in an attempt to avoid the notorious pain following this operation and various other postoperative complications such as urinary retention, early and late hemorrhage, faecal and flatus incontinence, delayed wound healing, incidence of anal stenosis due to large raw areas and recurrence.

The severe postoperative pain and the above said complications render the patient to inordinate risk for morbidity and mortality, the economical burden on patient by a longer hospital stay; longer bed occupancy and remaining off work for a number of weeks.

Operative treatment has been the method of choice in dealing with 3rd degree and the prolapsing haemorrhoids. As it is reviewed, the concept of the nature of haemorrhoids has been newly defined in which haemorrhoids are considered to be the result of downward displacement of the vascular submucous cushions of the anal canal. When the connective tissue of the anal sub mucosa degenerates, the cushions lose their support and descend to the lumen of the anal canal. Low fiber diet, constipation and repeated and prolonged straining may contribute to the descent of the anal cushions. The internal anal sphincter muscle is

said to be overactive in some patient with haemorrhoids. This sphincter spasm may result in anal outlet stenosis with a congestive effect on the vascular cushions, especially during the defecation.

In our society patients come late with prolapsing haemorrhoids. More over the cryosurgery and rubber band ligation apparatus are not available in all the hospitals. Our patients like to be looked as in-patients rather than getting ligation, cutting or cauterization done in outpatients and being sent home. Very often our outpatient departments are ill equipped and even minor procedures are not possible.

Despite continued research and evolution in different methods, the treatment of haemorrhoids is still controversial. Because different personalities suffer different problems no single treatment can be claimed as an effective mode due to equally good results achieved by different alternative. But the fact remains that the surgical haemorrhoidectomy is still the method of choice of many surgeons all over the world.

Today excision and ligation according to St.Mark's Hospital technique for haemorrhoid surgery is judged to be simplest, fastest and it is certainly the most reliable, definitive, satisfactory and a curative procedure.

Haemorrhoidectomy is considered to be a painful operation. Parks (1956) considered that the widely used operation of low ligation and excision (Conventional haemorrhoidectomy) involved ligation of the sensitive anal mucosa and further more pain was caused by the large areas of denuded anal canal leading to spasm and painful bowel action. After Haemorrhoidectomy the maximum resting pressure of anal canal is significantly raised and plays important role in making postoperative pain [10]. The purpose of an operation for haemorrhoids must be a successful excision of haemorrhoidal tissue with as little discomfort and disability as possible. From the foregoing consideration, it will be seen that special care is necessary for (i) the removal of the most of the dilated veins (ii) high ligation of the haemorrhoidal tissue (iii) fixation of the anal mucosa to the underlying muscle to prevent prolapse and to obliterate the submucous space.

It is seen that much of the pain in the postoperative period is due to the incorporation of sensitive anal mucosa in the ligation and due to the presence of pads. Ligation of the haemorrhoidal tissue above the mucocutaneous junction will therefore not

only be most curative but also less painful than the low ligation.

Another factor causing postoperative pain is the presence of large areas of anal wall denuded of epithelium. These areas may cause anal spasm, painful bowel actions and late recurrence, fistula and fissure-in-ano. Constant spasm narrows the anal canal and if fibrous tissue is deposited, it will cause anal stenosis. If an operation can be restricted to the removal of primary piles alone, it is not difficult to avoid the creation of large bare areas. Petit (1774), one of the founders of the modern surgery, observed that the epithelial covering of the pile was the sensitive part and that if it were first incised, the haemorrhoidal plexus could be ligated with less postoperative pain. He therefore, modified the ligation operation by dissecting off the skin and mucosa before transfixing the vascular tissue beneath. He claimed that by this means healing was more repaired and that the two mucosal flaps covered the haemorrhoidal pedicle to act as haemostatic agents.

Though it is claimed to have low incidence of postoperative pain, and many problems of haemorrhoidal surgery were solved by this submucous haemorrhoidectomy, it is perhaps surprising that it did not become universally accepted. One objection is quite apparent that it must have taken longer to perform than the simple ligation and excision. Moreover it is somewhat more difficult and tedious. The dissection of mucosal flaps is difficult and is accompanied by much bleeding if vascular haemorrhoids are present. But it has been favored by many surgeons as the early healing is assured because bare areas are immediately covered by mucosal flaps and ligation is performed under direct vision.

Statistically there was significant difference in the amount and severity of postoperative pain between two procedures. In group B i.e. submucous haemorrhoidectomy group, first few postoperative hours were more painful but the severity of pain lessened progressively in the later-postoperative period and there was a significant drop in the amount of injectable and oral analgesics demand by patients. Thus pain was mild to moderate in severity in the most of postoperative period as compared to conventional haemorrhoidectomy group and urinary retention was more common in patients who experienced more pain. So from the pain point of view, this procedure is better, attractive and acceptable for patients. Similar result

was obtained by You SY, Kim SH, Chung CS, Lee Dk. in their study open vs. closed haemorrhoidectomy [11].

Rectal bleeding and prolapse are the two cardinal symptoms of haemorrhoids, and therefore it is the effect on these symptoms by which the various treatments of the disease are usually judged. Both operation i.e. conventional (Ligation and Excision), and submucous haemorrhoidectomy provided an overall excellent control over the two cardinal symptoms of haemorrhoids such as bleeding and prolapse.

Submucous haemorrhoidectomy provided excellent results as far as control of bleeding and decreased chances of anal stenosis were concerned. Recurrence of prolapse was more common than bleeding with sub mucosal haemorrhoidectomy due to preservation of mucosa during the operation and persistence of this symptom or recurrence of prolapse cause dissatisfaction to some patients about this form of treatment. Redundant skin tags similarly cause problems and dissatisfaction. In this regard the conventional haemorrhoidectomy provided the patient excellent permanent relief of this symptoms. In our study, we used to excise all the skin tags at the time of primary operation to provide complete satisfaction of our patients especially with conventional method. So recurrence is usually due to poor preoperative evaluation and incomplete operation.

The severity of pain after various techniques was not of much difference except that the fact, that the pain was much less in later post operator period with submucous haemorrhoidectomy. Initially the severity of pain was equal to that with other techniques. Formation of skin tags, redundant haemorrhoidal tissue and chances of recurrence of haemorrhoids were more common with submucous haemorrhoidectomy where mucosa was preserved although the chance of postoperative anal stenosis were decreased with this technique.

CONCLUSION

Conventional haemorrhoidectomy (Ligation and excision) is the most reliable, definitive, satisfactory and curable procedure for the treatment of haemorrhoids. It is certainly the simplest and quick operation and can be carried out even if an experienced surgeon is not available. For large third degree haemorrhoids with prominent skin tags, no other method approaches the precision of an expertly performed operation.

Submucous haemorrhoidectomy can safely be carried out, if the selection of patients for operation is proper i.e. the haemorrhoids are not too big. Thus, this operation can give excellent results in terms of less postoperative pain and low chances of anal stenosis and can be practiced more often. Similar was conclusion of Arroyo A, Perez F, Miranda E, Serrano P, Candela F, Lacueva J et al. in their study published in international journal colorectal Dis 2004 [12].

REFERENCES

1. Norman s w. The anus and anal canal. In Russell RCG, Williams NS, Bulstrode CJK. Bailey and love's short practice of surgery. 24ed. London: Arnold, 2004: 1242-71.
2. Bhatti AA, Ahmed R, Butt MA. Comparative study between sclerotherapy and manual anal dilation in management of 2nd degree haemorrhoids. Pak post grad Med J 1993; 4:267-76.
3. Vanheaverzwyn R, Colin JF, van Wymersch T, Kartheuser A, Hoang P. Haemorrhoidal reviews. Acta Gastroenterol Belg 1995; 58:452-64.
4. Tanvir k, Shah SA, Ansar M. Out come of rubber band ligation of Haemorrhoids using suction ligator. J Ayub Med Coll Abbottabad 2004; 16:34-37.
5. Sheikh AR, Ahmed I. Comparative study of haemorrhoidectomy with rubber band ligation for 2nd and 3rd degree haemorrhoids. Specialist 1995; 12: 39-45.
6. Sayfan J, Becker A, Koltum L. Sutureless closed haemorrhoidectomy. Ann- Surg 2001; 234:21-4.
7. Anscombe AR, Hancock BD, Humphreys WV. A Clinical trial of the treatment of haemorrhoids by operation and Lord Procedure. Lancet 1974; 3: 250-53.
8. Saenz EV, Esparza JP, Magro PM, Aquirre JP, Farnandez FA, Rosales JM et al haemorrhoidal disease in a specialty medical center. Rev Gastroenterol Mex 2006; 71:428-32.
9. Raahave D. stapled anopexy for prolapsed haemorrhoids a new operation Ugeskr Laeger 2002; 164:3862-5.
10. Patti R, Angileri M, Miqliore G, Sammartano S, Termine S, Crivello F et al. Effectiveness of contemporary injection of botulinum toxin and topical application of glyceryl trinitrate against post operative pain after Milligan- Morgan haemorrhoidectomy. Ann Ital Chir 2006; 77:503-8.

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11. You SY, Kim SH, Chung CS, Lee DK. Open VS. Closed haemorrhoidectomy. Dis colon rectum 2005; 48:108-13.
 12. Arroyo A, F perez Serrano P, Candela F, Lacueva J, Calpena R et al. open versus closed haemorrhoidectomy. Int J colorectal Dis 2004; 19:3703.

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