

Original Research Article

Open haemorrhoidectomy revisited: the study of 25 cases

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ABSTRACT

Background: Haemorrhoids continue to be the commonest benign anorectal condition presenting with bleeding and constipation. The presentation may vary depending on the grade of haemorrhoids. Deciding the best therapeutic option is the biggest challenge faced by the attending surgeon in an era where newer therapeutic technologies for treatment continue to evolve. Therefore, revisiting the traditional surgical option of excision and ligation technique for grossly symptomatic piles was evaluated taking into consideration the cost of the procedure. Twenty five consecutive patients of symptomatic grade III and IV haemorrhoids were selected for the study to determine the outcome of the traditional open method (Milligan Morgan technique)

Methods: Twenty five patients after having been checked for fitness for anaesthesia underwent the open method of haemorrhoidectomy under spinal anaesthesia. On admission to hospital a detailed proforma which contained demographic details, and comorbidities was completed. All 25 patients underwent the same procedure by ligation excision technique. Details of operative findings including post-operative outcomes were studied prospectively. Results were evaluated.

Results: Of the 25 patients, one patient developed bleeding in the immediate post-operative period which required relook surgery and undermining of the oozing stump. Four patients required catheterisation for urinary retention. A six month follow up did not reveal recurrence or any sort of discomfort while passing stools.

Conclusions: Open haemorrhoidectomy (Milligan Morgan) continues to be the most optimum method for treatment of symptomatic piles grade III and IV.

Keywords: Complications, Haemorrhoids, Open, Surgical, Treatment

INTRODUCTION

Symptomatic haemorrhoids are one of the common conditions which bring a patient to consult a surgeon. In majority of cases a self-diagnosis is made by the patient and seeks treatment from quacks or traditional medicine practitioners until the condition becomes serious and unbearable. Over the counter medications are invariably used for this condition by patients themselves. Haemorrhoids enlarge as a result of pressures exerted from the haemorrhoidal arteries, portal veins and systemic veins through an arteriovenous shunt system at the level of the haemorrhoids.¹ This shunt accounts for

the bleeding to be bright red in colour. Common symptoms are pain, bleeding or prolapse usually associated with constipation. A variety of hypothesis have been postulated for the aetiology of haemorrhoids.^{1,2} Based on each hypothesis newer methods of treatment have evolved into practice. The cure rates of these methods are variable. Few of these methods have unnecessarily added to the cost of treatment without distinct therapeutic benefit. As a result, no single method can be considered as the gold standard of treatment.^{1,3} Deciding the best therapeutic option is based on the degree of the haemorrhoid. Usually grade III and grade IV haemorrhoids require surgical intervention. Doppler

guided haemorrhoidal artery ligation, stapler haemorrhoidectomy and the traditional open method of ligation and excision are the main options available. The cost involved in newer options limits their use in the developing world. The closed method for haemorrhoidectomy is more painful and has a chance of anal stenosis. Therefore, revisiting the traditional Milligan Morgan method was essential to recreate awareness of this safer, efficient and permanent option for the cure of haemorrhoids.

METHODS

Total 25 patients diagnosed as symptomatic haemorrhoids (grade III and IV) in period from January 2017 to June 2017 were included in the study.

Inclusion criteria

Symptomatic haemorrhoids either bleeding or prolapsing.

Exclusion criteria

- Pregnant women with symptomatic piles
- Haemorrhoids with suspicion of a growth
- Recurrent haemorrhoids.

On admission to hospital a detailed proforma was completed which contained demographic details, symptomatology and physical examination findings. Physical examination including abdomen examination, digital rectal examination and proctoscopy done in the clinic. Due to non-availability of flexible sigmoidoscopy, this was not performed. Investigations were carried out to evaluate fitness for the procedure.

All patients underwent open haemorrhoidectomy by Milligan-Morgan technique under spinal anaesthesia performed by the first author (KV). A simple enema was given in the morning of the day of surgery. Preoperative antibiotics were given. A combination of cephalosporin, aminoglycoside and metronidazole were given in the morning. The procedure was started with the lowest haemorrhoid at 7 o'clock position followed by the one at 3 o'clock position and finally by the one at 11 o'clock position. A V-shaped incision was made by the scalpel in the mucocutaneous junction around the base of the haemorrhoid followed by scissors dissection in the sub mucous space to strip the entire haemorrhoid from its bed. The dissection was carried cranially up to the pedicle, which was ligated with strong vicryl (No 1-0) and the distal part excised. Other haemorrhoids were similarly treated, leaving a skin bridge in-between to avoid stenosis. The wound was left open and a haemostatic gel foam roll left in the anal canal. Post-operative complications were evaluated. These included bleeding, retention of urine and pain. Patients were followed up for 6 months period from the date of the surgery for recurrence of symptoms and anal stenosis.

RESULTS

Twenty-five patients who underwent haemorrhoidectomy by the open method of ligation and excision. (Milligan Morgan procedure) were studied. Twenty were male and five were female patients (Table 1).

Table 1: Sex distribution of patients.

Sex	Male	Female
No.	20	05

Twenty two patients had grade III haemorrhoids and three had grade IV haemorrhoids (Table 2).

Table 2: Grade of the haemorrhoid.

Grade of haemorrhoid	n =25
III	22
IV	03

Five patients had comorbidities that is a combination of diabetes and hypertension. One patient who had comorbidities developed persistent oozing or reactionary haemorrhage in the early postoperative period. This necessitated a relook surgery. The patient underwent evaluation under general anaesthesia. One of the ligated stumps at 3 o'clock position was found to be oozing. The oozing stump was under run with a vicryl stitch. The bleed was controlled. Four patients developed acute urinary retention requiring urinary catheterization (Table 3).

Table 3: Postoperative complications.

Complications	n =05
Bleeding	01
Acute retention of urine	04

The urinary catheter was removed after for 48hours. The patients who developed complications of reactionary haemorrhage and acute retention of urine were discharged on the fifth post-operative day. Otherwise the rest of the patients were discharged on the third postoperative day after ensuring smooth passage of stools. They were asked to follow up on the seventh post-operative day for a digital rectal examination to look for narrowing of anal opening.

None of the patients in the study had any evidence of anal narrowing. Thereafter they were called after 6 weeks, 12 weeks and 24 weeks for digital rectal examination and proctoscopy to look for narrowing or recurrence. Anal stenosis was not seen in any of the twenty five patients. All patients were asymptomatic with no recurrence of symptoms. Thus, a six month follow up did not reveal anal stenosis, recurrence or any sort of discomfort while passing stools.

DISCUSSION

Haemorrhoids are best defined as “enlargement and distal displacement of the anal cushions.” The abnormal dilatation and dislocation of the underlying vessels together with damage to the supporting tissue. The major supporting cushions are at 3 o'clock, left lateral, 7 o'clock, right posterior, 11 o'clock right anterior position. Chronic straining is the main reason for pushing these cushions in a downwards direction. Since these cushions contain a lot of blood vessels, erosion of the overlying mucosa leads to bleeding associated with each act of defecation. Many a times the bleeding may be chronic or so torrential so as to cause either anaemia or a shocked state.⁴ Therefore addressing the bleeding issue is of utmost importance. In a certain group of patients bleeding may be mild but there may significant sudden alteration of bowel habits. These are patients in whom one should suspect a malignant cause. Such patients require detailed investigations either flexible sigmoidoscopy or preferably a complete colonoscopy. It is a safe procedure to carry out endoscopic evaluation of all piles patients especially those associated with altered bowel habits with weight loss.^{4,5} However younger age group patients suffering from chronic constipation for a long time who eventually develop bleeding and prolapse may not require an endoscopic evaluation. Therefore, careful evaluation and selection of patients is of utmost importance. The onus therefore lies on the surgeon to carefully study the symptoms and signs before selecting the patient for surgery.⁶

Complications of untreated haemorrhoids include chronic bleeding, prolapse, thrombosis and sepsis. All these require admission to hospital. Comorbidities need to be identified and controlled prior to surgery.⁷

Since there's a deficit in the supporting mechanisms of the cushions, excising the prolapsing part constitutes the mainstay of surgical intervention. The excision however should extend to the base of the pedicle. This will ensure sub mucous fibrosis and better anchorage of the submucosa to the underlying tissue. Two surgical methods help in addressing the problem. The newer method involves use of circular stapler specially designed for prolapsed haemorrhoids. Short term results with stapler haemorrhoidectomy are more gratifying.⁷⁻⁹ However long-term results are not promising as a result of increased incidence of recurrence and anal stenosis. Since the stapler is an industry driven product developed in the modern era with aggressive advertisements, patients fall prey and insist on undergoing this procedure.^{9,10}

The open technique of haemorrhoidectomy addresses both these issues extremely well i.e. removal of redundant anal cushions followed by fibrosis and anchoring of the mucosa to the underlying connective tissue. Since the procedure involves only primary haemorrhoids, the intervening mucosa continues to be

intact reducing the chances of stenosis. The main complication of open method is bleeding.¹¹⁻¹³ This can be prevented by adequate infiltration of mucosa before dissection. One needs to go as high as possible up to the root of the pedicle before applying trans fixation ligature with a strong absorbable suture material. A meticulous second look before packing with a gel foam cone is essential to prevent reactionary haemorrhage in the form of continuous oozing. Non-constipating analgesics, antibiotics and stool softeners are necessary for first five days after surgery. A sitz bath twice daily for first five days adds immensely to the comfort of the patient. If all these protocols are followed meticulously, the likelihood of secondary haemorrhage is significantly reduced. In the present study only one patient developed bleeding which required relook surgery which was controlled immediately by under running of the stump. Pain is a common accompaniment of most anorectal procedures. Infiltration with a local anaesthetic along with oral analgesia significantly reduces the chances of post op retention of urine.

Catheterization for 24 hours relieves distressful symptoms. Patients should be asked to follow up on the seventh post-operative day. Digital rectal examination should be performed to look for any narrowing. There was no evidence of narrowing in any of the patients in the present study. Patients should then be called after 6 weeks, 12 weeks and 24 weeks for reevaluation. In the event of suspected impending anal stenosis detected at any of the follow up visits, the traditional method of training the patient with the use of St. Mark's anal dilator is the best option. Though this method is hardly being adopted by surgeons in modern day practice, it still holds the promise and avoids the chances of developing anal stenosis at a later stage.⁸ In the context of the developing world where cost is an important determinant of the treatment option, the open method not only addresses the treatment of the disease but also reduces the healthcare cost of the treatment with a long lasting cure.

CONCLUSION

In India, where cost is an important determinant in making surgical choices, the open method is the best as it is not only cheaper but gives excellent long-lasting cure rates.

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