



**ORIGINAL RESEARCH PAPER**

**General Surgery**

**A COMPARATIVE STUDY OF UNDERRUNNING OF HAEMORRHOIDS AND OPEN HAEMORRHOIDECTOMY**

**KEY WORDS:**

**S. P Gayathre**

M. S, Institute Of General Surgery, Madras Medical College, Rajiv Gandhi Government General Hospital, Chennai, Tamilnadu, India

**M. Kudiyarasu\***

M. S, Institute Of General Surgery, Madras Medical College, Rajiv Gandhi Government General Hospital, Chennai, Tamilnadu, India  
\*Corresponding Author

**R. Kannan**

M. S, Institute Of General Surgery, Madras Medical College, Rajiv Gandhi Government General Hospital, Chennai, Tamilnadu, India

**Manasa A**

M. S, Institute Of General Surgery, Madras Medical College, Rajiv Gandhi Government General Hospital, Chennai, Tamilnadu, India

**ABSTRACT**

Haemorrhoids is one of the commonest clinical condition. There has been various surgical methods proposed in the treatment of Haemorrhoids. In this study we compare the efficacy of open Haemorrhoidectomy with Underrunning of Haemorrhoids in terms of early and late post op complications.

**INTRODUCTION**

Haemorrhoids are dilated veins occurring in relation to anus. Haemorrhoids are abnormalities of the vascular cushions of the anus. From the ancient days, that is from the period of Hippocrates, piles was treated by many modalities. Even at present it was claimed that all faculties of medicine - Siddha, Ayurvedha and Homeopathy are successful in practice. But most of them are not proven with scientific data. In Allopathy even though conservative managements are successful, in most of the cases surgery becomes necessary. The term 'pile' on the other hand derived from the Latin word 'pila', a ball, can be optly used for all forms of haemorrhoids or piles for literally every such condition which produces a swelling of some kind, even though it may not show externally.

Various treatment options are available for haemorrhoids. However, the main aim of all the surgical procedures which we have followed in the management of haemorrhoids is "obliteration of haemorrhoidal veins". In some of the procedures like ligation and excision, Park's procedure etc., there are chances of bleeding during surgery. In these procedures patients have considerable postop pain and also raw areas which take 4-6 weeks to heal. If the area happens to be big and there is no mucocutaneous junction between the 3 leaves of clover there is always a possibility of stricture. In our study, we have tried the ligation therapy by "underrunning of haemorrhoids", which yields better result with minimum discomfort to the patient and avoiding the complications. The purpose of this study is to evaluate a treatment option which is less traumatic to the patient and gives maximum benefits.

**AIM**

- To study the epidemiology and pattern of clinical presentation of haemorrhoids.
- Compare underrunning with routine ligation and excision therapy (open haemorrhoidectomy) for haemorrhoids in relation to
  - 1) Operative technique
  - 2) Blood loss during the procedure
  - 3) Immediate post op. problems & complications
  - 4) Incidence of long term complications like anal stenosis
  - 5) Results on followup (upto 6 months)

**MATERIALS & METHODS**

This study was done in patients of our unit in department of General Surgery at Govt. General Hospital, Chennai-3

between August 2003 and December 2005. Sixty patients were selected for the study, with thirty patients in each group. Inclusion Criteria: Only elective cases were included in the study. Patients with II or III haemorrhoids only were taken into the study.

**INVESTIGATIONS:**

1. Hb% done for all patients.
2. Patients above 40 years were subjected to sigmoidoscopy to rule out any proximal lesions (which if present, were excluded from the study).

After selecting the patients, they were randomly allotted into the following two groups.

**SURGICAL PROCEDURES:**

1. Open technique haemorrhoidectomy.
2. Under running of haemorrhoids, using atraumatic 1-0 chromic catgut.

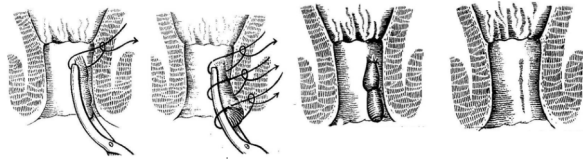
**HEMORRHOIDECTOMY :**

Ligation & Excision: Open technique Known as Milligan Morgan operation. With the patient anaesthetized and in the lithotomy position, a gentle two finger dilatation of the anal canal was performed. Dunhill forceps were placed on the perianal skin just outside the mucocutaneous junction, opposite to the primary haemorrhoids positions. As they were pulled down, a second Dunhill forceps was applied to the main bulk of each haemoroidal mass haemorrhoids so as to expose the "triangle of exposure". Once the triangle of exposure has been achieved the haemorrhoids were removed by dissection and ligation/excision With scissors, a V-shaped cut was made, each limb of which is placed on either side of the skin holders haemostat. This cut traverses the skin and corogator cutis ani. Exerting further traction a little blunt dissection exposes the lower border of the internal sphincter. A transfixing ligature is applied to the pedicle at this level. Each haemorrhoids, having been dealt with this manner were excised 1.25 cm distal to the ligature. The stumps of ligated haemorrhoids were returned to the rectum by tucking a piece of gauze into the anal canal. Hemostasis secured anal pack kept. T Bandage applied.

**UNDER RUNNING OF HAEMORRHOIDS :**

Under spinal anesthesia, lithotomy position, haemorrhoids

displayed the so called "triangle to exposure" of Milligan. Ligation of haemorrhoids done by under



running (no dissection at all) starting from the pedicle level about 2.5 cm above the dentate line using atraumatic 1-0 chromic catgut and under running done upto the Hilton's line using a continous stitch.

All the patients were given three doses of Ampicillin 1 gm IV & Inj. Metronidazole 500mg IV.

I dose preoperatively, other doses 6 hours & 24 hours post OP. Analgesics were given as when required basis. Sitz bath started on 1st POD.

Follow up: All the patients were followed up post operatively. Patients were discharged on third post operative day, if there were no complication. Patients were reviewed after 2 weeks, 6 weeks, 6 months. PR was done after 2 weeks. PR & Proctoscopy at 6 weeks and 6 months.

**OBSERVATION**

**1. BLEEDING**

Surgery	BLOOD LOSS (APPROX)					
	<25 ml (B <sub>1</sub> )		25-100 ml (B <sub>2</sub> )		>100 ml (B <sub>3</sub> )	
	No	%	No	%	No	%
Haemorrhoidectomy	5	16.6	15	50%	10	33.3
Under running	28	93.33	2	6.66	-	-

**1. ANALGESIC DOSES**

Analgesics were given as and when required

Surgery	no. of doses required		
	1	2	3 & above
Haemorrhoidectomy	-	-	30
Under running	24	5	1

**2. POST OP DEFECACTION**

Surgery	Bleeding PR during first motion	
	No	%
Haemorrhoidectomy	12	40
Under running	2	6.66

**3. RETENTION OF URINE:**

Surgery	urine retention			
	conservative management		needed catheterization	
	No	%	No	%
Haemorrhoidectomy	7	23.33	2	6.66
Under Running	2	6.66	-	-

Conservative management includes reassurance, providing privacy, hot fermentation.

Anal pack were kept in all cases who underwent open haemorrhoidectomy. It caused increase post op. pain and urinary retention when compared to patients who underwent under running haemorrhoids.

**RESULTS :**

**IN THE HAEMORRHOIDECTOMY GROUP**

- Significant intraoperative blood loss.
- Pain for minimum 2 weeks.
- It took 5 to 6 weeks to heal completely.

- PR and proctoscopy showed mild anal stenosis in one patient and multiple abrasions in anal mucosa in five cases.
- No recurrence

**IN THE UNDER RUNNING GROUP:**

- Almost no blood loss during surgery in most of the cases.
- Minimal post operative pain and discomfort.
- It took 4 to 5 weeks to completely disappear.
- PR & Proctoscopy showed normal pattern of healing.
- 3 patients had skin tag.

**SUMMARY & CONCLUSION**

Patients who had under running for II & III haemorrhoids were comfortable and there was no bleeding. Minimal post op pain which was tolerable.

**ADVANTAGES OF UNDER RUNNING:**

1. Easier technique
2. Even a beginner can do without much difficulty.
3. No dissection and no raw area.
4. No per Op. and post Op. bleed.
5. Less post Op. pain
6. No urinary retention
7. No chance of anal stenosis.
8. Patients can return to work early.
9. Less time consuming technique.
10. No need to keep anal pack and for post op. dressing.
11. Patients were relieved of all symptoms following surgery.
12. Best for patients with low hemoglobin.
13. Can be combined with surgery for fissure.

Therefore this is a good alternative technique in the management of II and III haemorrhoids.

It is a better procedure with almost no post op. complication compared to the classical open haemorrhoidectomy. Under running is a therapeutic option for haemorrhoids better than any other procedures. Easier to the surgeon and comfortable to the patients.

Hence we conclude that under running of haemorrhoids is a better surgical option for treatment of haemorrhoids than open haemorrhoidectomy.

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