



COMPARATIVE STUDY OF HEMORRHOIDECTOMY AND RUBBER BAND LIGATION IN TREATMENT OF SECOND AND THIRD DEGREE HEMORRHOIDS IN CUDDALORE

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ABSTRACT

Introduction The diagnosis of hemorrhoids is mainly depend on proctoscopic examination. The study evaluates comparative results of rubber band ligation and hemorrhoidectomy. This study was conducted over the period of 6 months from April 2022 to September 2022. It includes 50 patients having 2nd or 3rd degree hemorrhoids who attend the surgical OPD of Cuddalore government medical college and hospital. These 50 patients selected randomly and divided into two groups. Each patient was subjected to sigmoidoscopy to exclude other lesion. Patients of fissure, fistula, and malignency excluded. Hemorrhoidectomy and rubber band ligation are equally effective especially in 2nd degree hemorrhoids. However rubber band ligation should be considered the first line treatment in 2nd degree hemorrhoids because being an op procedure. Although rubber band ligation is not effective as hemorrhoidectomy in third degree hemorrhoids. Rubber band ligation is preferred in patients who are unfit for surgery or have concurrent disease that contraindicates anaesthesia.

KEYWORDS : Hemorrhoids, Hemorrhoidectomy, Rubber band ligation, Minimal invasive procedure.

INTRODUCTION

The anal canal is lined by upper two thirds by columner epithelium and in the lower third squamous epithelium which meets at the dentate line.

Internal hemorrhoids are classified into four degrees

- Grade 1: bleeding without prolapse
- Grade 2: prolapse with spontaneous reduction
- Grade 3: prolapse with manual reduction
- Grade 4: incarcerated, irreducible prolapse

Patients presents to OPD/Casualty with complaints of blood per rectum and /or prolapsing mass per anus. Some patients presented with strangulated hemorrhoids and some with anaemia.

Assessment include anoscopy and digital rectal examination in left lateral position

Treatment includes conservative and surgical

Conservative treatment

1. Plenty of oral fluids
2. High fiber diet
3. Avoiding straining at stools and prolonged staying on toilet
4. Sitz bath.

Minimal invasive procedures

1. Rubber band ligation
2. Inj. Sclerotherapy
3. Laser hemorrhoidectomy

Surgical procedure

1. Closed hemorrhoidectomy
2. Open hemorrhoidectomy
3. Stapled hemorrhoidectomy

MATERIALAND METHODS

After getting consent, detailed clinical history was taken in all patients with bleeding per rectum, constipation, prolapse, painful defecation, discharge per rectum, dietary habits,

family history of hemorrhoids

General examination was done in all patients Each patient was subjected to DRE, Proctoscopy, Sigmoidoscopy

Investigations:

CBC, RBS, RFT, serum electrolytes, urine routine, chest X-ray ECG done in all patients. All the patients were given proctolysis enema in the evening and the morning before surgery or RBL.

All the 25 patients of the hemorrhoidectomy group were kept fasting 8hrs prior to surgery. All the patients were advised to report in OPD/Casualty in case of any complications in the form of bleeding per recutm, pain, fever, swelling, discharge.final assessment was done 2 months post procedure regarding effect of treatment on rectal bleeding, prolapse, pain and subjective improvement.

Table 1: Proctoscopic examination of R group

S. No.	Grade of Hemorrhoids	No. of cases	% of age
1.	Grade 1 hemorrhoids	0	0%
2.	Grade 2 hemorrhoids	18	72%
3.	Grade 3 hemorrhoids	07	28%

Table 2: Proctoscopic examination of H group

S. No.	Grade of Hemorrhoids	No. of cases	% of age
1.	Grade 1 hemorrhoids	0	0%
2.	Grade 2 hemorrhoids	13	52%
3.	Grade 3 hemorrhoids	12	48%

RESULTS

Total No. of Patients 50.

Male 35 and Female 15.

In the rubber band ligation(R) group 15 were males and 10 were femals. In the Hemorrhoidectomy (H) group 17 males and 8 females. The age of the patients ranged from 17 to 70 age groups with mean age 43.5 years. The commenest symptoms were prolapse and bleeding and pain.

Gender of patients in this study

Gender	R Group	H Group
Male	15	17
Female	10	8

Least common was discharge per rectum. Among All the patients with less fiber in their diet and positive family history and non-vegetarians 15 patients.

In the R group 6 patients had anemia 2 had uncontrolled hypertension 3 had copd. In hemorrhoidectomy group 4 patients anemia 7 had hypertension.

Proctoscopic examination revealed that 62% of the patients had grade 2 hemorrhoids and 38% had grade 3 hemorrhoids in the all. In the R group 18 of the patients had the grade 2 and 7 had grade 3 hemorrhoids. In the hemorrhoidectomy group 13 patients were grade 2 and 12 patients were grade 3 hemorrhoids.

Assessment 2 months post procedure revealed the following points

1. RBL resulted in no bleeding in 70% of patients compared with 80% after hemorrhoidectomy.
2. There were 18 patients in R group and 13 patients in H group with grade 2 hemorrhoids. 14 patients had no prolapse following RBL compared with 12 after hemorrhoidectomy.
3. Effect on manual reduction of prolapse: there were 7 patients in the R group and 12 patients with grade 3 hemorrhoids in the H group 50% of patients showed no prolapse after RBL compared with 87% after hemorrhoidectomy.
4. Patients assessment of treatment following RBL showed excellent improvement in 16(64%) patients moderate improvement 5(20%) patients and no improvement in 4(16%) patients.

DISCUSSION

RBL is a minor procedure that can be done in minor OT or in OPD. RBL produces mucosal ulcer that heals by cicatrization fixing mucosa to underlying skin which prevents decent hemorrhoids during defecation. Hemorrhoidectomy aims to excise most of the hemorrhoidal plexus of veins to produce symptomatic relief .hemorrhoidectomy requiring anaesthesia and 2 to 5 days hospital stay. The mean age of patients 43.5years. The overall Male, Female ratio 7:3 with 2.1:1 in the H group and 1.5:1 in the R group. Rectal bleeding present in 94% patients. Rectal prolapse was present in 99 % of our patients. Discharge per rectum is present in 20% of patients. Pain is present in 35% of patients in both H and R group. Constipation is present in 60% of patients. Anemia is present in 18% of patients.

A 2 months follow up we observed no bleeding in 75% in the R group and 85% in the H group. Improvement of bleeding was reported in by 20% in the R group and 16 in the H group.

These findings suggest RBL as an excellent method and equally efficient as hemorrhoidectomy in control of bleeding. In our study 77% patients had no prolapse following RBL compared with 92% following hemorrhoidectomy in grade 2 hemorrhoids. In grade 3 hemorrhoids no prolapse in 50% patients following RBL compared with 85% following hemorrhoidectomy, improvement in prolapse following RBL in 28% compare to 12.5% after hemorrhoidectomy and no change in 21% in RBL group compared to 0% in hemorrhoidectomy group.

In our study patient assessment of treatment modality showed that 65% reported RBL as excellent modality compared with 70% following hemorrhoidectomy, 20% were moderately satisfied with RBL compared with 20% following hemorrhoidectomy and 15 % reported no improvement in RBL group compared with 10% following hemorrhoidectomy. In

our study 100% patient required postoperative analgesia following hemorrhoidectomy and 25% patients required analgesia following RBL.

SUMMARY AND CONCLUSION

1. Hemorrhoidectomy and RBL are almost equally effective especially in 2 degree hemorrhoids. Hemorrhoidectomy aims to excise most of hemorrhoid plexus of veins.
2. Hemorrhoidectomy is a painful procedure that involves hospital stay of 5 to 7 days with an additional time off work 2 to 5 week and is associated with complications such as secondary hemorrhage, stenosis.
3. RBL is safe, pain free procedure, does not involve anesthesia and is an outpatient procedure. Patient report back to work soon after the procedure.
4. By restoring to the policy of RBL as the first choice in second degree hemorrhoids, many a hospital beds can be saved for more sick patients and it can take pressure off the surgical waiting lists.
5. RBL not as effective as hemorrhoidectomy, in third degree hemorrhoids does improve bleeding and prolapse. Hence it is highly recommended for patients who are unfit for surgery or have concurrent disease which contraindicates anesthesia.

We support the view that RBL should be considered the first line treatment in second degree hemorrhoids. In the third degree hemorrhoids hemorrhoidectomy gives best results, and RBL is recommended as the first line of treatment for those patients in whom their is contraindication fir surgery.

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