

## A Comparative Study Between Stapled Haemorrhoidopexy And Milligan Morgan Method Of Open Haemorrhoidectomy

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### **Abstract:**

**Background:** In the age group of 20 to 60 years , who are fit to undergo surgery and to evaluate the outcomes of complications of the surgical procedure namely stapled haemorrhoidopexy and milligan morgan methd of open haemorrhoidectomy. I want to convey the better form of surgical procedure in view of post operative complications , less side effects, early return to work in the patients undergoing the above surgical procedures. In this study both the surgical procedures were done for patients having Grade iii and Grade iv haemorrhoids on a randomized basis . Also the study was conducted over a period of 1 years and the study group where followed up for a period of 1month .Both the procedures were done with experts to minimize the post operative complications .Postoperative pain , hospital stay and return to normal work, local sepsis and urinary retension are the important parameters dealt in this study .All the post operative complications a n d o u t c o m e s are dealt in this study. At the most, the learning and teaching aspects of surgical kills is of beneficial value in this study .

**Materials and Methods:** The study is done to compare the various post operative outcomes in the early post operative and follow up period between 25 cases of Open Haemorrhoidectomy and 25 cases of Stapled Haemorrhoidopexy done for haemorrhoids , at GRH, Madurai medical college hospital, Tamil Nadu. The period of study includes one year from November 2020 to November 2021. Data benefits and analysis were compared in terms of duratiob of hospital stay, post-operative pain, wound ,healing, recurrence rate and other complications.

**Results:** Milligan – Morgan’s method of open haemorrhoidectomy is considered as standard operative management over a century . But it has morbidity in the forms of s post operative pain , delayed bowel activity , need for analgesics , urinary retension late return to work, anal stenosis and anal sepsis.

Stapled Haemorrhoidopexy is a recent concept in the management of haemorrhoids with less morbidity than the former procedure , that was evident by this study .The average hospital stay is about 1 to 2 days less in stapler method .The post operative period pain is less in stapler method when compared to open method Urinary retention in stapler method is 3 times lesser than open method .Return of normal stool passage is early in stapled group. Reactionary haemorrhage is low in stapled group .Return to normal work is one week earlier in stapler group .

**Conclusion:** In comparison of postoperative outcomes of open haemorrhoidectomy and stapled haemorrhoidopexy in this study. Postoperative pain is considerably less in stapled haemorrhoidopexy group and hence the need of analgesics .Length of hospital stay is comparatively less in stapled haemorrhoidopexy. Urinary retension , return of earlier bowel activity, local sepsis are also comparatively better in the stapler method .Return to normal routine work is earlier in the stapled haemorrhoidopexy group in this study. Hence this study shows Stapled haemorrhoidopexy. has better patient acceptability and early recovery and excellent outcome on comparing with Open haemorrhoidectomy .

**Key Word:** Stapled haemorrhoidopexy, Open haemorrhoidectomy

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## **I. Introduction**

Haemorrhoids are common surgical condition occurring in the middle aged people. The term haemorrhoids is derived from the Greek word 'haemorrhoids' meaning flow of blood while the word 'Pile' comes from Latin pila meaning a pill or ball thus indicating the two cardinal symptoms namely bleeding and mass per anum. The classical Milligan Morgan method of open Haemorrhoidectomy was done with morbidity eg. post operative pain ,urinary retention, bleeding, long duration of stay in hospital, etc. Stapled hemorrhoidopexy is a recent advance initially advised for prolapsed hemorrhoids. In this study, I compare the various post operative complications and outcomes of both the procedures and early recovery .

## **II. Material And Methods**

The study is done to compare the various post operative outcomes in the early post operative and follow up period between 25 cases of Open Haemorrhoidectomy and 25 cases of Stapled Haemorrhoidopexy done for haemorrhoids , at GRH, Madurai medical college hospital in the interval period of one year from November 2020 to November 2021.

**Study Design:** Prospective open observational study.

**Study Location:** This was a tertiary care teaching hospital based study done in Department of General Surgery, at Government Rajaji Hospital, Madurai, Tamil Nadu.

**Study Duration:** November 2020 to November 2021.

**Sample size:** 50 patients.

**Sample size calculation:** The sample size was estimated on the basis of a single proportion design. The target population from which we randomly selected our sample was considered. The sample size actually obtained for this study was 50 patient. We planned to include 25 patients in each study group.

**Subjects & selection method:** The study population was drawn from consecutive haemorrhoid patients who presented to Govt Rajaji Hospital, Madurai with complaints of bleeding per anum, difficulty in defecation. Patients were divided into two groups (each group had 25 patients) according to the nature of surgery underwent.

Group A (N= 25 patients) –Stapled haemorrhoidopexy.

Group B (N=25 patients) –Milligan Morgan method of open haemorrhoidectomy.

### **Inclusion criteria:**

1. Age between 20 to 50 years ,
2. Both male and female gender ,
3. Second degree Internal Haemorrhoids , not responding to medical management.
4. Third degree Internal Haemorrhoids.

### **Exclusion criteria:**

1. Age less than 20 years and above 50 years ,
2. Associated other peri anal infections ,
3. Associated fissure-in-ano ,
4. Associated fistula-in-ano ,
5. Altered bowel habits
6. Recurrent haemorrhoids .

### **Procedure methodology :**

The patients under the study are evaluated for surgical and anaesthetic fitness . Then they were admitted in the surgical unit concerned at Government Rajaji Hospital, Madurai Medical College during the period of November 2020 to November 2021 . After getting informed and written consent , Both male and female in the age group between 20 years and 50 years are subjected for elective surgery for both the Stapled haemorrhoidopexy and Open haemorrhoidectomy , selected at a random basis .

About 25 patients had Open hemorrhoidectomy and other 25 patients who underwent Stapled hemorrhoidopexy are included in this study . The patients in the post operative ward are given pain relief medications, normal diet and sitz bath from evening. All the patients were observed for pain , reactionary haemorrhage , first stool passed, defecation incontinence, length of hospital stay , Pain , anal stenosis , local sepsis, recurrence and return to work were observed in follow up period .

**Group A** - Stapled haemorrhoidopexy (25 patients).

**Group B** - Milligan Morgan method of open haemorrhoidectomy (25 patients).

**Statistical analysis :**

Data was analyzed using Student's *t*-test was used to ascertain the significance of differences between mean values of two continuous variables . In addition, paired *t*-test was used to determine the difference between the side effects, complications and other variables that compares the two groups. Chi-square tests were performed to test for differences in proportions of categorical variables between two groups. The level  $P < 0.05$  was considered as the cutoff value or significance.

**Distribution of hospital stay**

IMMEDIATE POST OP		
Duration of Hospital Stay	Open	Stapled
DAY 2	3	18
3	16	3
4	4	2
5	2	2
Total	25	25
Mean	3.2	2.52
SD	0.764	0.963
P'value	0.008 Significant	

In this study Duration of Hospital stay is less in staple Haemorrhoidopexy with p value 0.008 which is significant

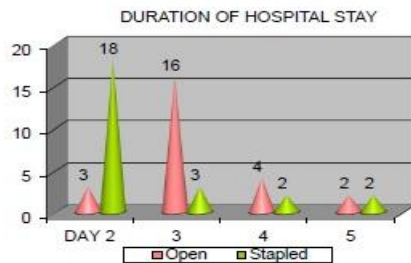
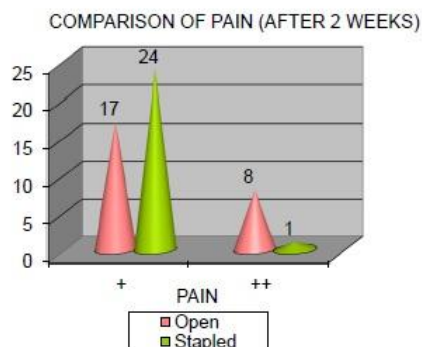


Table 6. Distribution of Pain after two weeks

AFTER 2 WEEKS FOLLOW - UP		
Pain	Open	Stapled
+	17	24
++	8	1
Total	25	25
P'value	0.027 significant	

In this study Pain after two weeks is less in staple Haemorrhoidopexy with p value 0.027 which is significant

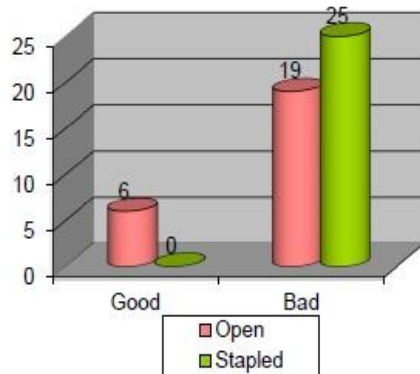


AFTER 2 WEEKS FOLLOW - UP

Healing	Open	Stapled
Good	6	0
Bad	19	25
Total	25	25
P'value	0.030 significant	

In this study wound Healing after two weeks is soon in staple Haemorrhoidopexy with p value 0.030 which is significant

COMPARISON OF HEALING (AFTER 2 WEEKS)



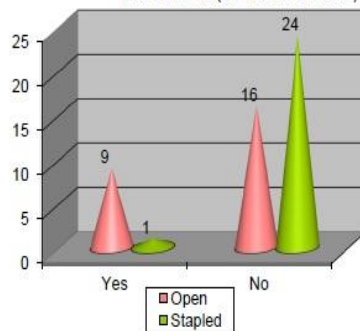
**Distribution of wound healing after 2 weeks**

AFTER 2 WEEKS FOLLOW - UP

Infection	Open	Stapled
Yes	9	1
No	16	24
Total	25	25
P'value	0.013 significant	

In this study wound Infection after two weeks is less in staple Haemorrhoidopexy with p value 0.013 which is significant

INFECTION (AFTER 2 WEEKS)

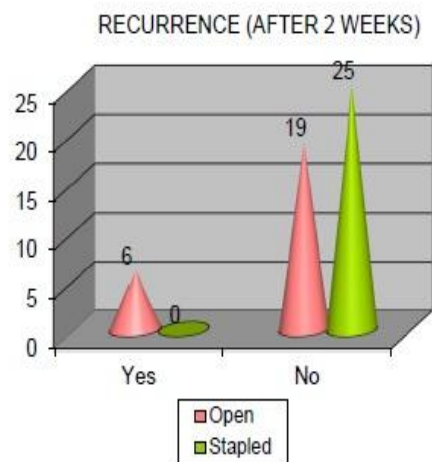


**Distribution of infection after 2 weeks**

AFTER 2 WEEKS FOLLOW - UP

Recurrence	Open	Stapled
Yes	6	0
No	19	25
Total	25	25
P'value	0.030 significant	

In this study wound Recurrence after two weeks is less in staple Haemorrhoidopexy with p value 0.030 which is significant



**Distribution of recurrence after 2 weeks**

### III. Discussion

Milligan – Morgan’s method of open haemorrhoidectomy is considered as standard operative management over a century . But it has morbidity in the forms of s post operative pain , delayed bowel activity , need for analgesics ,urinary retension late return to work,anal stenosis and anal sepsis.Stapled Haemorrhoidopexy is a recent concept in the management of haemorrhoids with less morbidity than the former procedure , that was evident by this study .The average hospital stay is about 1 to 2 days less in stapler method .The post operative period pain is less in stapler method when compared to open method Urinary retention in stapler method is 3 times lesser than open method . Return of normal stool passage is early in stapled group.Reactionary haemorrhage is low in stapled group . Return to normal work is one week earlier in stapler group .Defecation incontinece is less in stapled method than comparing with open method.

### IV. Conclusion

In comparison of postoperative outcomes of open haemorrhoidectomy and stapledhaemorrhoidopexy in this study Postoperative pain is considerably less in stapled haemorrhoidopexy group and hence the need of analgesics .Length of hospital stay is comparatively less in stapled haemorrhoidopexy Urinary retension , return of earlier bowel activity,local sepsisare also comparatively better in the stapler method .Return to normal routine work is earlier in the stapled haemorrhoidopexy group in this study.Hence this study shows Stapled haemorrhoidopexy has better patient acceptability and early recovery and excellent outcome on comparing with Open haemorrhoidectomy .

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