

**Study of the clinical outcomes of the patients following stapled haemorrhoidectomy at tertiary care hospital**

<sup>1</sup>Dr. Rishabh Gupta, Postgraduate, Department of Surgery ASCOMS & Hospital Sidhra, Jammu, Jammu and Kashmir, India.

<sup>2</sup>Dr. Sunidhi Badyal, Postgraduate, Department of Surgery ASCOMS & Hospital Sidhra, Jammu, Jammu and Kashmir, India.

<sup>3</sup>Dr. B.S. Pathania, Professor, Department of Surgery ASCOMS & Hospital Sidhra, Jammu, Jammu and Kashmir, India.

<sup>4</sup>Dr. Servishet Saraf, Postgraduate, Department of Surgery ASCOMS & Hospital Sidhra, Jammu, Jammu and Kashmir, India.

**Corresponding Author:** Dr. Servishet Saraf, Postgraduate, Department of Surgery ASCOMS & Hospital Sidhra, Jammu, Jammu and Kashmir, India.

**How to citation this article:** Dr. Rishabh Gupta, Dr. Sunidhi Badyal, Dr. B.S. Pathania, Dr. Servishet Saraf, “Study of the clinical outcomes of the patients following stapled haemorrhoidectomy at tertiary care hospital”, IJMACR- November – December - 2022, Vol – 5, Issue - 6, P. No. 162 – 166.

**Copyright:** © 2022, Dr. Servishet Saraf, et al. This is an open access journal and article distributed under the terms of the creative commons attribution noncommercial License 4.0. Which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**Type of Publication:** Original Research Article

**Conflicts of Interest:** Nil

---

**Abstract**

**Background:** Haemorrhoidal disease is ranked first among diseases of rectum and large intestine and estimated worldwide prevalence ranges from 2.9% to 27% of which more than 4% are symptomatic. Haemorrhoidal disease is a frequent disease of the anal canal. It is downward sliding of Anal Cushions. Haemorrhoids are important vascular cushions located in the anal 1 study of the clinical outcomes of the patients following stapled haemorrhoidectomy at tertiary care hospital canal as part of the normal anatomy. These cushions are composed of arteries, veins, smooth muscle fibers and connective tissue embedded in thickened submucosa. Since Longo first described Stapled Haemorrhoidectomy (SH) in 1998, it has been emerging

as the procedure of choice for symptomatic Haemorrhoids. The success and efficacy of haemorrhoidectomy procedures can be evaluated based on postoperative healing duration, complications, recurrence as well as questionnaires that reveal patient’s perspective, Therefore it has been proposed to assess the clinical outcome following stapled haemorrhoidectomy.

**Material and methods:** This prospective studies for evaluation of quality of life and functional outcome following stapler haemorrhoidectomy was conducted in the post graduate department of surgery ASCOMS, Jammu for the period of one year to study the clinical outcome following stapled haemorrhoidectomy.

**Results:** The age of the patient ranged from 18 to 78 years of age with an average age of 45.73 years.

Majority of patients in this study were males 60% whereas females were 40%. 21 (70%) of the patients had Grade III haemorrhoids and 9 (30%) patients had Grade II haemorrhoids. Postoperative pain was assessed by Visual analogue score at 6, 12, 24 hours. In our study, no patient complained of Urinary retention, post operative bleeding, anal incontinence, mucosal discharge, anal stenosis or constipation.

**Conclusion:** Keeping all the benefits of stapled haemorrhoidectomy the clinical. Keeping all the benefits of stapled haemorrhoidectomy the clinical.

**Keywords:** haemorrhoidectomy, vascular, ASCOMS

### **Introduction**

Haemorrhoids are one of the common condition encountered in general surgical clinic. Large numbers of patients are asymptomatic, bleeding during defecation is the most common presenting symptom.

Haemorrhoids are highly vascular submucosal cushions that generally lie along the anal canal in three columns—the left lateral, right anterior, and right posterior positions. These vascular cushions are made up of elastic connective tissue and smooth muscle, but because some do not contain muscular walls, these cushions may be considered sinusoids instead of arteries or veins. Clinically evident bleeding arises from the per-sinusoidal arterioles and are therefore arterial in nature.

Haemorrhoids play a 3 Keeping all the benefits of stapled haemorrhoidectomy the clinically significant physiologic role in protecting the anal sphincter muscles and augment closure of the anal canal during moments of increased abdominal pressure (e.g., coughing, sneezing) to prevent incontinence and contribute 15 to 20% of the resting anal canal pressure. Increases in abdominal pressure increase the pressure in the inferior vena cava that cause these vascular cushions to engorge

and prevent leakage. This tissue is also thought to help differentiate stool, liquid, and gas in the anal canal. The etiology is not clear, with some factors or gravity, straining, irregular bowel habits. Other causes are pregnancy, birth, spicy food, chronic cough, obesity, alcohol, benign prostate hyperplasia cirrhosis, intra-abdominal tumors are some activities that require long period of immobility<sup>3</sup>. In both sexes, a peak in prevalence was noted from age 45-65 years, with a subsequent decrease after age 65 years. The development of haemorrhoids before age 20 years was unusual. The dentate line differentiates external and internal Haemorrhoids. External Haemorrhoids are located below the dentate line and drain via the inferior rectal veins into the pudendal vessels and then into the internal iliac vein.

These vessels are covered by anoderm that is comprised of modified squamous epithelium. As a result, these tissues contain pain fibers and affect how patients present and are treated. Internal Haemorrhoids lie above the dentate line and are covered by columnar cells that have visceral innervations.

These drain via the middle rectal veins into the internal iliac 4 vessels<sup>3</sup>. Hence the present study was conducted to study the clinical outcome following stapled haemorrhoidectomy.

### **Materials and methods**

This prospective study in 30 patients was conducted for evaluation of clinical outcome following stapler haemorrhoidectomy in the post graduate department of surgery ASCOMS, Jammu for the period of one year to study the clinical outcome following stapled haemorrhoidectomy. Inclusion criteria all the patients with symptomatic II- and III-degree haemorrhoids with or without concomitant external haemorrhoids.

Exclusion criteria Thrombosed haemorrhoids, Concomitant perianal abscess / fistula, Patients with I and IV-degree haemorrhoids, Patients with portal hypertension, Patients not fit for anaesthesia. Equipment used was PPH-03 set (Procedure for prolapse and haemorrhoids set) it consists 33 mm Endo surgical circular stapler, Circular Anal Dilator, Purse String Suture anoscope.

After all preoperative investigations, Colonoscopy (Age > 50 yrs) and informed consent, the Patients were kept on light low residual diet a day before surgery and kept fasting overnight. They were give Sodium Phosphate Enema night before surgery. They were operated under spinal anaesthesia. Patients were given injectable Ceftriaxone (1.5 gms) on or before surgery. Foley's Catheter in situ was place before surgery in all 30 5 patients.

The procedure of the stapled haemorrhoidectomy was performed by same experience surgeon and same assistant team. Assessment of postoperative pain done on a visual analogue score by the patient on 6, 12, 24 hours, 1week and 4 weeks.

**Results**

Age of the patients ranged from 18-78 years with maximum patients in the range of 29-38 years with mean age was 45.73 years.

Table 1: Distribution of Patients according to age.

Age Group (in years)	No. of Patients (n)	Percentage
18-28	4	13.33%
29-38	8	26.66%
39-48	5	16.66%
49-58	6	20%
59-68	3	10%
69-78	4	13.33%
<b>Total</b>	<b>30</b>	<b>100%</b>

Graph 1:

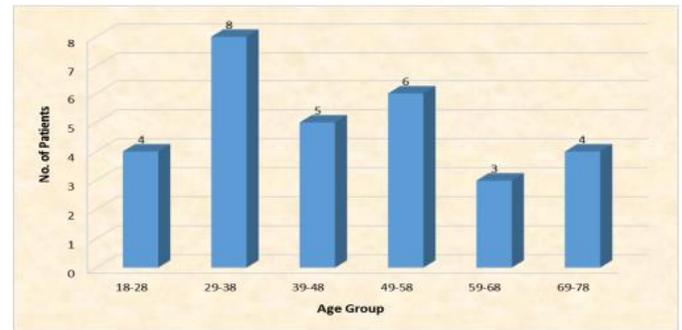


Table 2: Distribution of Patients according to gender.

Gender	No. of Patients (n)	Percentage
Male	18	60%
Female	12	40%
<b>Total</b>	<b>30</b>	<b>100%</b>

Graph 2:

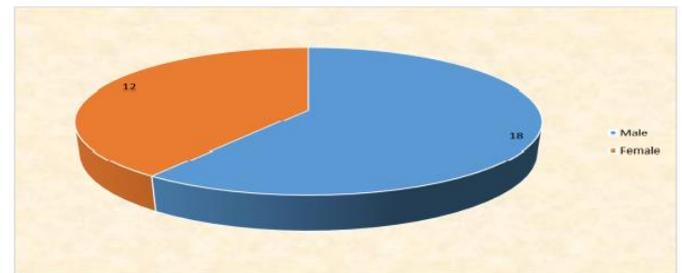


Table 3: Distribution of Patients according to grade of haemorrhoids.

Grade	No. of Patients (n)	Percentage
Grade-II	9	30%
Grade-III	21	70%
<b>Total</b>	<b>30</b>	<b>100%</b>

**Post-operative findings**

Pain was assessed post-operatively using visual analogue scale.

Table 4.1: Distribution of Patients according to visual Analogue Score at 6 hrs.

Visual Analogue Score	No. of Patients (n)	Percentage
Mild (1 -3)	0	0%
Moderate (4-7)	24	80%
Severe (8-10)	6	20%
<b>Total</b>	<b>30</b>	<b>100%</b>

Table 4.2: Distribution of Patients according to visual Analogue Score at 12 hrs.

Visual Analogue Score	No. of Patients (n)	Percentage
Mild (1-3)	12	40%
Moderate (4-7)	16	53.33%
Severe (8-10)	2	6.66%
<b>Total</b>	<b>30</b>	<b>100%</b>

Table 4.3: Distribution of Patients according to visual Analogue Score at 24 hrs.

Visual Analogue Score	No. of Patients (n)	Percentage
No Pain (0)	6	20%
Mild (1-3)	18	60%
Moderate (4-7)	6	20%
Severe (8-10)	0	0%
<b>Total</b>	<b>30</b>	<b>100%</b>

Table 4.4: Distribution of Patients according to visual Analogue Score at 1 Week

Visual Analogue Score	No. of Patients (n)	Percentage
No Pain (0)	28	93.33%
Mild (1-3)	2	6.66%
Moderate (4-7)	0	0%
Severe (7-10)	0	0%
<b>Total</b>	<b>30</b>	<b>100%</b>

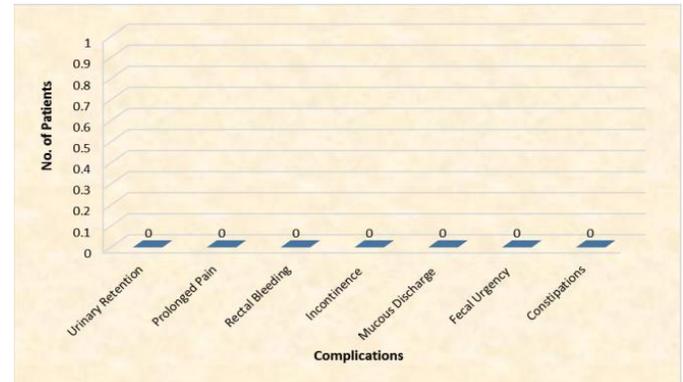
Table 4.5: Distribution of Patients according to visual Analogue Score at 1 Month

Visual Analogue Score	No. of Patients (n)	Percentage
No Pain (0)	30	100%
Mild (1-3)	0	0%
Moderate (4-7)	0	0%
Severe (7-10)	0	0%
<b>Total</b>	<b>30</b>	<b>100%</b>

Table 5: Distribution of Patients according to post-operative Complications (At 1 Week)

Complications	No. of Patients (n)	Percentage
Urinary Retention	0	0%
Prolonged Pain	0	0%
Rectal Bleeding	0	0%
Incontinence	0	0%
Mucous Discharge	0	0%
Fecal Urgency	0	0%
Constipations	0	0%
<b>Total</b>	<b>0</b>	<b>0%</b>

Graph 3:



### Discussion

Haemorrhoidal disease is ranked first among diseases of rectum and large intestine and estimated worldwide prevalence ranges from 2.9% to 27% of which more than 4% are symptomatic.

Among 30 patients of our study, the age of the patient ranged from 18 to 78 years of age with an average age of 45.73 years. The youngest patient in our series was an 18 years old female and the eldest patient was 78 years male. Similar observation was observed by other studies with a mean average age of 46.02 years, 48 years and 53 years 4,5,8.

In our study males were out numbering females. Majority of patients in this study were males 60% whereas females were 40%. Similar to our study, another study also observed that in a study of 150 patients there were more men 80.6% as compared to females 19.3% 10. However one study in contrast had observed 40.9% male and 59.9% females group<sup>1</sup>. Though, in a study conducted in 2009, it was found that 45% of the patients were males and 55% were females<sup>9</sup>.

As regards grading of haemorrhoids, we have included Grade II and Grade III haemorrhoids in our study whereas Grade IV haemorrhoids have been excluded from our study. 21 (70%) of the patients had Grade III haemorrhoids and 9 (30%) patients had Grade II

haemorrhoids. A study was done in 2008 with 400 patients which also included more patients with Grade III haemorrhoids as compared to Grade II haemorrhoids 22 (5.5%)<sup>2</sup>.

Post-operative pain was assessed by Visual analogue score at 6, 12, 24 hours. At 6 hours, 24 (80%) patients had moderate whereas 26 (20%) had severe pain (VAS score 7-9). The mean VAS score at 6 hrs was 5.43. At 12 hours, Post Operatively in our study 12 (40%) patients had mild pain (VAS Score <3), 16 (53.33%) had moderate pain (VAS Score < 6) and 2 patients had severe pain (VAS Score 7-9) with the mean VAS score of 3.83. However a 2002 study observed VAS Score of 2.0 at 12 hrs of surgery<sup>7</sup>. At 24 hrs, 11 Post operatively in our study 24 (80% patients had mild pain (VAS<3), 6 had moderate (VAS<6) pain at 24 hours post operatively and the mean VAS score was 1.77. Similarly other researchers evaluated the mean VAS Score of 0.8 at 24 hrs of surgery<sup>7</sup>. In contrast to our study, in 2003 a study observed mean VAS Score of 3 at 24 hours of procedure<sup>6</sup>. In our study, no patient complained of Urinary retention, post of bleeding anal incontinence, anal stenosis and mucosal prolapse.

### Conclusion

Keeping all the benefits of stapled haemorrhoidectomy the clinical outcome in patients treated with this method is definitely better and clinical outcome in these patients is excellent.

### References

1. Bhandari RS, J Lakhey P, Singh YP, Mishra PR, Singh KP. Stapled haemorrhoidectomy versus open haemorrhoidectomy: a prospective comparative study. Journal of Chitwan Medical College. 2014;4(4):7-11.
2. Bona S, Battafarano F, Romario UF, Zago M, Rosati R. Stapled anopexy: postoperative course and

functional outcome in 400 patients. Diseases of the colon & rectum. 2008;51(6):950-5. 12.

3. Cintron J, Abcarian H. Benign anorectal: hemorrhoids. The ASCRS textbook of colon and rectal surgery. New York: Springer-Verlag, Inc. 2007;2:156-77.
4. Faucheron JL, Voirin D, Abba J. Rectal perforation with lifethreatening peritonitis following stapled haemorrhoidopexy. Journal of British Surgery. 2012;99(6):746-53.
5. Ommer A, Hinrichs J, Möllenberg H, Marla B, Walz MK. Longterm results after stapled haemorrhoidopexy: a prospective study with a 6-year follow-up. Diseases of the colon & rectum. 2011;54(5):601-8
6. Palimento D, Picchio M, Attanasio U, Lombardi A, Bambini C, Renda A. Stapled and open haemorrhoidectomy: randomized controlled trial of early results. World Journal of Surgery. 2003;27(2):203-7.
7. Pavlidis T, Papaziogas B, Souparis A, Patsas A, Koutelidakis I, Papaziogas T. Modern stapled Longo procedure vs. conventional Milligan-Morgan haemorrhoidectomy: a randomized controlled trial. International Journal of Colorectal Disease. 2002; 17 (1): 50-3.
8. Ram M, Khan S, Tiwari A, Sainia T, Anand K. Surgical Review: International Journal of Surgery Trauma and Orthopedics.2020
9. Shaba hang H, Maddah G, Mofidi A, Nooghabi MJ, Khaniki SH. A randomized clinical trial of laser hemorrhoidoplasty vs Milligan and Morgan haemorrhoidectomy. World. 2019;12(2):60.
10. Sultan S, Rabahi N, Etienney I, Atienza P. Stapled haemorrhoidopexy: 6 years' experience of a referral center. Colorectal Disease. 2010;12(9):921-6