



A STUDY OF POST-OPERATIVE COMPLICATIONS IN CONVENTIONAL HAEMORRHOIDECTOMY VS STAPLED HAEMORRHOIDECTOMY IN PATIENTS WITH 3rd AND 4th DEGREE HAEMORRHOIDS.

General Surgery

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ABSTRACT

Aim: To study Post-operative complications in Conventional haemorrhoidectomy vs Stapled haemorrhoidectomy in patients with 3rd and 4th degree haemorrhoids.

Materials And Methods: It was a prospective randomised study conducted in the department of general surgery from January 2016 to December 2018. A total of 50 patients divided in 2 groups of conventional haemorrhoidectomy (CH) and stapled haemorrhoidectomy (SH) equally.

Results: Two patients (8%) in CH group suffered from Urinary retention as compared to only one patient (4%) in SH group. Only one patient each in both the group suffers from fever and bleeding. Post operative VAS scores calculated at 12 hours, 24 hours, 72 hours and at 7th day showed P value as statistically significant at all times.

Conclusion: Stapled haemorrhoidectomy (SH) causes less post operative complications as compared to Conventional haemorrhoidectomy.

KEYWORDS

Haemorrhoidectomy, Complications

INTRODUCTION:

Haemorrhoids are also one of the most common benign ano rectal problems worldwide affecting more than 1 million American population per year.(1) The term haemorrhoids and piles are often used as synonymous, but they are different entomologically. Haemorrhoids derived from Greek word, meaning bleeding (Haima -Blood, Rhoids -flowing). The term piles is derived from Latin word "Pilla" meaning ball.(2) According to Golighar the term piles seems to be more appropriate for this condition, as all piles do not bleed but every such patient has swelling in anal canal due to piles.(3) According to Parks, internal haemorrhoids are saccular dilatation of terminal part of haemorrhoidal venous plexus lying in sub mucosa of the upper anal canal just above the mucocutaneous junction.(4) Gass and Adams consider piles to result from degeneration supportive tissue in anal canal.(5) Discovery of anal cushions supported this theory, the concept of "symptomatic anal cushion" as new definition of internal haemorrhoids is presently being accepted widely.(5, 6) The role of surgery as treatment comes mainly in third degree and fourth degree haemorrhoids. Although mortality with this condition is very low, the morbidity is very high. When conservative management fails and patient present with third degree or fourth degree haemorrhoids, the only option available is to do haemorrhoidectomy, the known preferred method.

Even though surgery offers most dramatic and effective relief for many patients, it has been notorious for post-operative pain, hospital stay and duration of time required for healing of wound which may take 3 to 6 weeks. Realization of this fact has been stimulus to surgeons all over the world to search for alternative technique of surgery for treatment of severe haemorrhoids to overcome the drawback of open/conventional haemorrhoidectomy (CH). Among the newer techniques in surgery currently available LONGO-MILITO technique using circular anal stapler has shown promise with minimal post operative pain and early return to work.(6) Being a relatively new technique large number of research studies are still needed to compare it with conventional MILLIGAN-MORGAN open haemorrhoidectomy (CH). This current study was prospective, randomized, comparative study of conventional (open / MILLIGAN-MORGAN) haemorrhoidectomy versus stapled haemorrhoidectomy done in patients coming to our hospital studying their post operative complications.

MATERIALS AND METHODS:

This prospective randomized controlled study was carried out in the department of general surgery of a tertiary teaching hospital from January 2016 to December 2018 on patients were phase 3 and phase 4 haemorrhoids with the following exclusion criteria:

Patients with

1. Thrombosed, Strangulated And Infected Haemorrhoids;
2. fissure and fistula;

3. associated inflammatory bowel disease;
4. polyps, tumor or solitary rectal ulcer;
5. haemorrhoids in pregnancy.

Each patient underwent thorough clinical history taking and physical examination as per proforma and 50 consecutive eligible patients after final diagnosis and operative fitness and ready to take part in the clinical study were randomly assigned in to two groups, 25 in CH group and 25 in SH group. Informed consent in their own language was taken from all patients participating in the study.

Statistical Analysis

SPSS 16 was used for the statistical analysis and appropriate tests were applied. Probability level of 0.05 was considered significant.

OBSERVATIONS AND RESULTS:

A total of 50 patients were studied out of which CH group consisted of 25 patients and SH group consisted of 25 patients. Mean age of the patients in CH group is 53.40±13.86 years while that in SH group is 51.92±11.49 years. Combined proportion of male patients and female patients in both groups were 33 (66%) and 17 (34%) respectively. Proportion of patients with Third Degree haemorrhoids in CH group and SH group were 14 (56%) and 15 (60%) respectively. Proportion of patients with Fourth Degree haemorrhoids in CH group = 11 (44%) while that in SH group was 10(40%).

Tables1: Distribution Of Demographic Characteristics In The Study Population:

Parameters	CH group N (%)	SH group N (%)	P value
Gender:			
Male	15(60%)	18 (72%)	0.370
Female	10(40%)	07 (28%)	
Degree of haemorrhoids:			
Third degree	14 (56%)	15 (60%)	>0.05
Fourth degree	11 (44%)	10 (40%)	

Post operative VAS scores were calculated at 12 hours, 24 hours, 72 hours and at 7 th day. Mann Whitney U test was applied. P value is statistically significant (P value <0.001, at all time points.)

Tables2: Table Showing Post Operative VAS Scores In The Two Groups

Post Operative Pain VAS score	CH group (Mean ± SD)	SH group (Mean ± SD)	P value
12 hrs	5.92±0.90	2.52±0.71	0.001
24 hrs	4.32±0.90	1.48±0.58	0.001
72 hrs	3.96±1.01	1.32±0.62	0.001
7 days	2.96±0.97	0.68±0.74	0.001

Two patients (8%) in CH group suffered from Urinary retention as compared to only one patient (4%) in SH group. Only one patient each in both the group suffers from fever and bleeding.

Comparison of complication in both group

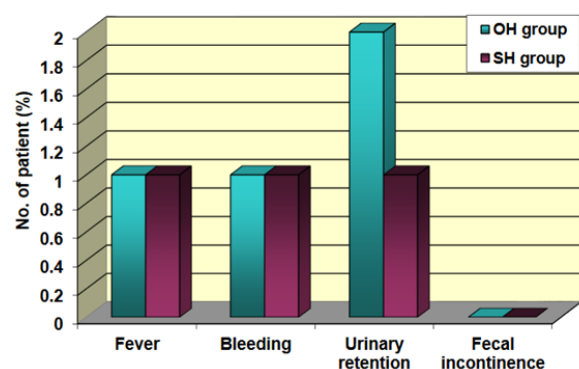


Figure 1 Showing Post Operative Complications In Both Groups

DISCUSSION:

In our hospital conventional haemorrhoidectomy and stapled haemorrhoidectomy, both were performed routinely on patients with haemorrhoids. The study was conducted on 50 patients diagnosed to have Third degree and Fourth degree haemorrhoids, who were ready to take part in our study.

In pre operative findings, data collection shows us the age distribution, sex distribution and about distribution of degree of haemorrhoids in two groups. Mean age of the patients in CH group is 53.40 ± 13.86 years and in SH group is 51.92 ± 11.49 years, difference not significant. Sex distribution indicates that 60% of patients in the CH group and 72% of patients in the SH group are male, while only 40% of patients in CH group and 28% of patients in the SH group are female. Difference is statistically insignificant. Patients in CH group with third degree haemorrhoids is 56% and fourth degree haemorrhoids is 44%, while in SH group it is found to be same. In study by Bikhchandani J et al, the mean age of patients was 46.02 years (SD 12.33) in the stapled group and 48.64 years (SD 14.57) in the open group. Third degree and fourth degree haemorrhoids were more common in men (i.e., 80.9% and 85.7% in the stapled and open group, respectively).(7)

Post-operative data collection included VAS scores for pain, patients having complications like bleeding, urinary retention, fever, faecal incontinence / urgency. Visual analogue scores for pain in the CH group at 12 hours, 24 hours, 72 hours and 7 days are 5.92 ± 0.90 , 4.32 ± 0.90 , 3.96 ± 1.01 , 2.96 ± 0.97 respectively, while in SH group, corresponding VAS scores were 2.52 ± 0.71 , 1.48 ± 0.58 , 1.32 ± 0.62 , 0.68 ± 0.74 . The VAS scores for pain were significantly lower in SH group as compared to OH group at all time points. 8% patients in CH group suffered from Urinary retention as compared to only 4% patient in SH group. Only one patient each, in both the groups suffered from fever and bleeding.

Faecal incontinence / urgency not noticed in any patient of either group during the short follow-up. In study by Bikhchandani Jet al, the pain scores were significantly lower in the stapled group even after 2 weeks of surgery. The patients in the stapled group required significantly less number of doses of non-opioid as well as opioid analgesics as compared with the open group.(7) Cheetham M Jet al, reported persistent severe pain and faecal urgency has been found in a disturbingly high proportion of patients after stapled haemorrhoidectomy. The mechanism behind this phenomenon is unclear, although muscle incorporation in the doughnut may have a role.(8) Pavlidis Tet al, reported postoperative pain scores at all time points and the mean epidural morphine requirement was lower in SH group. The complication rate did not differ (three cases of postoperative bleeding in SH group and two cases in CH group). At follow-up no recurrence or complains were recorded except three cases of mild incontinence (one in SH group and two in CH group).(9) Gravié JF et al concluded that stapled haemorrhoidectomy causes significantly less postoperative pain.(10) Ortiz Het al, showed that the stapled operation was significantly less painful than conventional haemorrhoidectomy. There were no significant differences in the total number of complications; however, the rate of recurrent prolapse was higher after

stapled haemorrhoidectomy than after conventional diathermy haemorrhoidectomy.(11)The stapled procedure does not involve any surgery on the sensate anal mucosa below the dentate line, so it is less painful. Visual analog pain scores at 12 hours, 24 hours, and day 3, and 7 were significantly favorable in the stapled group. Mean pain scores in various other studies conclusively prove that the postoperative pain is less after stapled technique.(12, 13)

CONCLUSIONS:

It can be concluded that Stapled haemorrhoidectomy causes less post operative complications as compared to Conventional haemorrhoidectomy.

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