Original Research Article

Comparative study of stapler haemorrhoidopexy and open haemorrhoidectomy in rural areas of Thodupuzha

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Abstract

Background: Haemorrhoids are one of the most common anorectal diseases, haemorrhoids are most commonly seen in 3, 7, 11 o'clock position. The main complaints with which patients come will be per rectal bleeding and prolapse. Open haemorrhoidectomy is been done for 3rd and 4th grade haemorrhoids and there is significant postoperative pain after removing the haemorrhoidal tissue. Another technique called as stapler haemorrhoidopexy in which there is less postoperative pain and early return to normal activities is possible. This is a prospective comparative study between open haemorrhoidectomy (OH) and stapler haemorrhoidopexy (SH) in terms of age, sex, grade, duration, postoperative pain, hospital stay.

Methods: 100 patients were taken with grade 3rd and 4th grade haemorrhoids in Department of General Surgery Al Azhar Medical College from March 2019 to March 2021. Out of 100 patients 50 patients were undergone open haemorrhoidectomy and 50 were undergone stapler haemorrhoidopexy.

Results: Stapler haemorrhoidopexy has far superior advantage over open in terms of postoperative pain, hospital stay and return to normal activities.

Conclusion: Stapler haemorrhoidopexy when compared with open haemorrhoidectomy has less postoperative pain, analgesics required and shorted hospital stay period and also early return to

normal activities. Stapler haemorrhoidopexy should be the gold standard method for 3rd and 4th degree haemorrhoids.

Key words

Haemorrhoids, Open Haemorrhoidectomy (OH), Stapler Haemorrhoidopexy (SH).

Introduction

Haemorrhoidal disease is ranked first among the disease of rectum and anal canal and worldwide prevalence ranges from 2.9% to 27.9% of which more than 4% are symptomatic [1]. For prolapsing haemorrhoids (3rd and 4th degree) most frequently done procedure is Milligan-Morgan haemorrhoidectomy [2] and Ferguson closed haemorrhoidectomy techniques [3]. Both the techniques are associated with severe pain postoperatively due to wounds below the dentate line and perianal skin [4]. Stapler haemorrhoidopexy has shown a decrease in postoperative pain, short recovery time and early return to normal activities [5]. This is a study in which comparison of open haemorrhoidectomy and staplerhaemorrhoidopexy done as a prospective comparative study.

Materials and methods

A prospective study comparing OH and SH was done in Department of General Surgery, Al Azhar Medical College, Thodupuzha from March 2019 to March 2021 and 100 patients were taken of which 50 were undergone open haemorrhoidectomy and 50 stapler haemorrhoidopexy.

Inclusion criteria were patients with 3rd and 4th grade haemorrhoids [15].
Exclusion criteria were 1st and 2nd degree haemorrhoids and cases associated with fissure and fistula [11].

Preanesthetic checkup was done for both OH and SH patients. All the patients were given bowel preparation and surgery was done by retraction of pile mass with artery forceps and diathermy dissection and excision. The pedicle with haemorrhoidal artery was ligated with 1-0 vicryl. The stapler haemorrhoidopexy was done with haemorrhoidal circular stapler (33 mm) device.

All the patients received postoperative same care and they were discharged when their pain was reduced and when patients felt comfortable for discharge. All the patients were been followed up after 1 week.

Results

Out of the OH and SH comparative studies, majority of patients were aged 40± and 45± in both groups. Postoperative pain was more in open haemorrhoidectomy then bleeding was a postoperative complication in some cases of open haemorrhoidectomy. Analgesics given were compared. The open haemorrhoidectomy patients had to be given analgesics more than to stapler haemorrhoidopexy. The number of postoperative stay has also been decreased for stapler haemorrhoidopexy. Also the analgesics comparison for the patient with open haemorrhoidectomy requires more number of days than stapler haemorrhoids. **Table – 1 to 3** shows the difference in the treatment for open and stapler haemorrhoids.

Table - 1: Age and sex distribution.

Method	Stapled	Open
Age	40±10	45±10
Sex (m/f)	30/20	28/22
Duration	3±2	4±2

Table – 2: Post-operative Pain Score.

Time	Stapler	Open
24hrs	3±1	6±2
48hrs	2±1	5±1
72hrs	1±1	3±1

Table – 3: Post-operative Comparison.

Parameter	Stapler	Open
Analgesics	1±1	10±2
Hospital stay	2±1	4±2
Bleeding	4	10
Return to normal activities	6±2	12±2

Discussion

Milligan-Morgan and Ferguson Haemorrhoidectomy are short frequently performed surgical procedures for symptomatic 3rd and 4th degree haemorrhoids [8]. However patients experience postoperative pain, so they take longer time for resumption of normal activities [19]. Also long duration for wound to heal [9]. Sachin, et al. in their study found that, in stapler haemorrhoidopexy group 38% underwent surgery within 20-30 minutes [14]. The mean duration of surgery was 33 minutes, ranging from 25 to 55 minutes. In open haemorrhoidectomy group, mean duration was 44 minutes ranging from 25 to 55 minutes.

However Shao, et al. found that the conventional haemorrhoidectomy required large time as compared to stapler technique [16].

When compared in terms of postoperative pain, significant advantages are there for stapler haemorrhoidectomy [6]. Schalaby, et al. demonstrated pain score of 2.5 for stapled group while it was 7.6 for open group during hospital stay [13].

A Racabulto, et al. in his study demonstrated significantly less analgesic tablet required for stapled group when compared with open haemorrhoidectomy [12, 17].

Schalaby and Desoky noted that mean time to healing of anal wound was significantly less after stapled haemorrhoidopexy than after Milligan Morgan procedure. Delayed wound healing leads to persistent discharge which is disturbing to patients [7].

Shao, et al. in his meta-analysis demonstrated that the pooled data has supported that there is statistically significant difference in operating time between two procedures in favor of stapler haemorrhoidopexy [10, 18].

Conclusion

Stapler haemorrhoidopexy when compared with open haemorrhoidectomy has less postoperative pain, analgesics required and shorted hospital stay period and also early return to normal activities. So stapler haemorrhoidopexy should be the gold standard method for 3rd and 4th degree haemorrhoids.

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