Original Article

Hemorrhoidectomy

Short Term Outcome Between Conventional VS Stapled Hemorrhoidectomy in Patients Having 3rd and 4th Degree Hemorrhoids

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ABSTRACT

Objective: To compare the short term outcome between conventional hemorrhoidectomy and stapled hemorrhoidectomy in the treatment of 3rd and 4th degree haemorrhoids in the term of postoperative complications, pain and hospital stay.

Study Design: Comparative study

Place and Duration of Study: This study was conducted at the Department Surgery and OPD at Liquate Medical University Hospital Hyderabad/Jamshoro with 6 months duration from November 2015 to April 2016.

Materials and Methods: All the cases more than 18 years of age, both genders and diagnosis of with Grade 3 or 4 hemorrhoids were selected. Brief history of duration of illness and examination including proctoscopy were carried out. Patients were randomly divided into two groups, group 1 cases were treated with conventional hemorrhoidectomy, and patients in group two were treated with the stapled hemorrhoidectomy. Surgeries were performed by consultant general surgeons. All information was recorded in Perform.

Results: In this study 64 patients with 3rd and 4th degree hemorrhoids were selected and equally divided in two groups, 32 were underwent conventional hemorrhoidectomy and 32 were underwent stapled hemorrhoidectomy, most common age groups were 31-40 years and 40-50 years in 34.37% and 37.50% patients respectively. Male gender was in majority 70.31%. According to the clinical presentation bleeding was the most common in 43(67.18%) cases following by Discharge, Itching, Prolapse and Others with percentage of 35(54.68%), 21(32.81%), 14(21.87%) and 30(46.87%)respectively. Staples hemorrhoidectomy showed good efficacy as compare to conventional hemorrhoidectomy, as well as moderate and severe pain were significantly more in patients those were underwent conventional haemorrhoidectomy, P-value 0.007. Bleeding and wound infection were high in conventional group p-value 0.01 and hospital stay was also significantly shorter in stapled group from conventional group.

Conclusion: Stapled haemorrhoidectomy is a choice surgical treatment option for 3rd and 4th degree hemorrhoids, this technique showed fewer complications, less postoperative pain and hospital stay as compare to conventional haemorrhoidectomy.

Key Words: Haemorrhoids, Stapled haemorrhoidectomy, Conventional haemorrhoidectomy

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INTRODUCTION

Haemorrhoidal disease is commonest anorectal disease, affecting, in various forms, almost 50% of people over the age of 50 years, and is one of the surgical problems to which there is still no unanimity of opinion as to the best form of surgery.[1] The most important aspect in the diagnosis of hemorrhoids is to exclude other more life-threatening conditions and bleeding from the rectum.[2]

Symptomatic hemorrhoids are no longer as agonizing as before because of the new modalities of operation that require shorter hospital stay and allowing patients to return to work earlier.[3] During years, many modifications have been created to operation of excision of hemorrhoids consuming scissors the outcome improvement, particularly postoperative pain. Milligan-Morgan conventional hemorrhoidectomy is commonly practiced procedure and is considered through to be the current standard for the haemorrhoidal surgical treatments.[4] It is a traditional effective approach; however, it is frequently accompanied with big prevalence of the complications, like as hemorrhage, urinary retention, and postoperative pain.[5] Surgical treatment[6] is considered being the best therapeutic modality for 3rd and 4th degree haemorrhoidal disease. Open and closed haemorrhoidectomy are the mostly used ones among

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the traditional options. Both are favored by surgeons due to their low post- operative complications plus better symptomatic relief. But post operatively both results in severe pain.[7] On other hand it is suggested that Stapled technique as an effective and valid option in the treatment of 3rd and 4thdegree hemorrhoids with excellent patient's satisfaction.[8] In the different studies different efficacy is reported of these both procedures, therefore purpose of present study is to compare efficacy between conventional and stapled hemorrhoidectomy in the term of postoperative complications, pain and hospital stay at LUMHS Jamshoro

MATERIALS AND METHODS

This comparative study had carried out department of general surgery at Liaquat medical university hospital Hyderabad/Jamshoro with 6 months duration from November 2015 to April 2016.All the cases more than 18 years of age, both genders and diagnosis of with Grade 3 or 4 hemorrhoids were selected. All the cases with Grade 1 or 2 hemorrhoids, coexisting perianal disease, previous anal surgery and with severe co-morbidities like uncontrolled diabetes mellitus, chronic HCV and HBV were excluded. Subjects were selected through outpatient department OPD. Brief history of duration of illness and examination including proctoscopy were carried out and written consent was taken. All the necessary laboratory investigations including radiology were carried out. Patients were randomly divided into two groups, patients in group one were treated with conventional hemorrhoidectomy and patients in group two were treated with the stapled hemorrhoidectomy. Surgeries were performed by consultant general surgeons. All the data regarding age, sex, duration of disease, disease grads and postoperative complications was documented. Prophylactic antibiotic and painkillers were given equally preoperatively. All the data will be entered in the Performa. Data was analyzed in SPSS version 16.0

RESULTS

In this study 64 patients with 3rd and 4th degree hemorrhoids were selected and equally divided I n two groups, 32 were underwent conventional hemorrhoidectomy and 32 were underwent stapled hemorrhoidectomy, most common age groups were 31-40 years and 40-50 years in 34.37% and 37.50% patients respectively. Male gender was in majority 70.31% as compare to females 29.68%. Mostly cases were noted with less than 3 years of hemorrhoids duration.Table:1

according to the clinical presentation bleeding was the most common in 43(67.18%) cases following by Discharge, Itching, Prolapse and Others with percentage of 35(54.68%), 21(32.81%), 14(21.87%) and 30(46.87%)respectively.Table:2

In our data 3rd degree haemorrhoids was found in majority of the cases 62.505 as compare to 4th degree in 37.50% of the cases. Fig:1

Staples hemorrhoidectomy showed good efficacy as compare to conventional hemorrhoidectomy, as well as moderate and severe pain were significantly more in patients those were underwent conventional haemorrhoidectomy, P-value 0.002. Bleeding and wound infection were high in conventional group p-value 0.01 and hospital stay was also found shorted significantly in stapled procedure as compare to conventional procedure.Table:3

Table No.1: Basic Characteristics Of Patients n=64

Basic Characteristics	Numbers	%
Age groups		
18-30 years	10	15.62%
31-40 years	22	34.37%
40-50 years	24	37.50%
>50 years	08	12.50%
Gender		
Male	45	70.31%
Female	19	29.68%
Duration of disease		
<3 years	40	62.50%
>3 years	24	37.50%

Table 2: Clinical presentation of patients n=64

Clinical presentation	Numbers (%)
Bleeding	43(67.18%)
Discharge	35(54.68%)
Itching	21(32.81%)
Prolapse	14(21.87%)
Others	30(46.87%)

Table No.3: Patients distribution according to postoperative complications and hospital stay n=64

Compli-cations and hospital stay	Haemorrhoidectomy		
	Conventional N=32	Stapled N=32	P value
Postoperative pain			
No	05(15.62%)	12(37.50%)	0.002
Mild	12(37.50%)	13(40.62%)	
Moderate	08(25.0%)	05(15.62%)	
Severe	07(21.87%)	02(06.25%)	
Bleeding	04(12.50%)	01(03.12%)	0.02
Wound infection	03(09.37%)	00	
Urinary retention	02(06.25%)	01(03.12%)	
Hospital stay			
Less than 2 days	20(62.50%)	28(87.50%)	0.001
More than 2days	12(37.50%)	04(12.50%)	

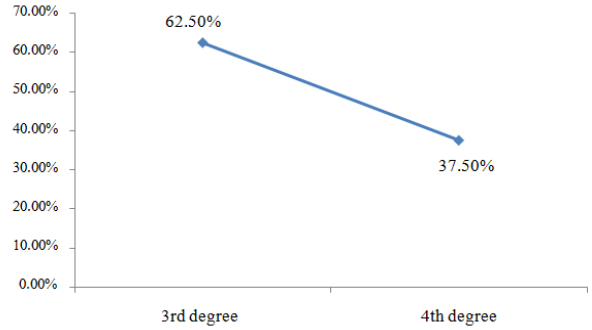

Figure No.1: cases distribution according to degree of haemorrhoids n=64

DISCUSSION

Haemorrhoids is a frequently observed disease in surgical practice and. various non-surgical and surgical treatments are available. However in this study tow surgical techniques conventional and stapled hemorrhoidectomies were compared in the treatment of 3rd and 4th degree hemorrhoids, and we found good efficacy as; low rate of moderate and severe pain, less complications and short hospital stay in stapled groups cases as compare to conventional groups cases. Similarly on other hand Chalkoo M et al[9] concluded that stapled hemorrhoidectomy is the safe and valid surgical procedure as compare to traditional Milligan-Morgan procedure, it is very easy in perform well tolerated and very cost effective than the conventional procedure. Kulkarni S et al[10] stated that stapled Haemorrhoidectomy is less painful with shorter duration of hospital stay and resumption of daily activity is faster than the open haemorrhoidectomy. In this study young aged and middle aged peoples were found majority as well as most common age groups were 31-40 years and 40-50 years i.e. 34.37% and 37.50% patients respectively. Kulkarni S et al[10] also found male in the majority as, 78% were males and 22% females in open hemorrhoidectomy, 90% were males and 10% females in stapled hemorrhoidectomy. In our study Male gender was in majority 70.31% as compare to females 29.68%. Qureshi MSet al[11] reported that men to women ratio 3:1 with the median age of 39 years.

According to the clinical presentation bleeding was the most common in 43(67.18%) cases following by Discharge, Itching, Prolapse and Others with percentage of 35(54.68%), 21(32.81%), 14(21.87%) and 30(46.87%) respectively. Similar finding were also found in the study of ABID KH Jet al[8]. In our data 3rd degree haemorrhoids was found in majority of the cases 62.505 as compare to 4th degree in 37.50% of the cases. Whereas ABID KH Jet al[8] reported that 17(68%) cases of third degree and 8 (32%) cases of fourth degree hemorrhoids.

Staples hemorrhoidectomy showed good efficacy as compare to conventional hemorrhoidectomy. Pain is the very important variable for hemorrhoidectomies as well as in our study moderate and severe pain was significantly more in patients those were underwent conventional haemorrhoidectomy, P-value 0.002. Similarly Kulkarni S et al[10] reported post-operative pain according to Visual Analog score was 1.9, scores lesser for stapler haemorrhoidectomy compared to open haemorrhoidectomy. In a study by Palimento D et al[12] mentioned that pain according to visual analog score was lower in stapler haemorrhoidectomy versus open haemorrhoidectomy. Bhandari RS et al[13] also proved lesser post-operative pain in the stapled group. The reduction in pain is attributed to the procedure being carried out above the dentate line which has no nerve endings carrying pain. In our series bleeding and wound infection were high in conventional group p-value 0.01. ABID KH Jet al[8] reported bleeding in 100% cases. Kulkarni S et al[10] reported that complications like post-operative bleeding, post-operative urinary retention and anal incontinence were commonest and almost same in both the groups p value 0.46.

In our study Hospital stay was also significantly less in the patients were underwent stapled procedure as compare to conventional group P-value 0.001.Kulkarni S et al[10] reported that post-operative hospital stay was less by 0.6 score for stapler haemorrhoidectomy compared to open haemorrhoidectomy which is statistically significant with p<0.001Bikchandani J et al.[14] demonstrated that mean hospital stay of 1.24 days in stapler haemorrhoidectomy compared to 2.76 days in open haemorrhoidectomy with a p< 0.001. Khan NF et al.[15] mentioned that hospital stay found significantly less in stapled group 3.37 ± 2.2 as compare to open haemorrhoidectomy 2.03 ± 0.81, p= 0.003. Bhandari R Set al.[13]stated that the post-operative hospital stay was definitely less for stapled haemorrhoidectomy compared to open haemorrhoidectomy..

CONCLUSION

We concluded that Stapled haemorrhoidectomy is a choice surgical treatment option for 3rd and 4th degree hemorrhoids, this technique showed fewer complications, less postoperative pain and hospital stay as compare to conventional haemorrhoidectomy.

Conflict of Interest: The study has no conflict of interest to declare by any author.

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