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Study on Prevalence and Surgical Management of Haemorrhoid's in a Tertiary Care Teaching Hospital in a Rural Area

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Abstract

***Background**: Haemorrhoids, which is also termed as piles characterized by the enlarged and bulged blood vessels surrounding the supporting tissues present in the anal canal of an individual. In the present study, an attempt has been made to find the prevalence of haemorrhoids and surgical management done in our geographical area.*

***Methods**: The present study was retrospective, cross-sectional study from the period of 1st January 2013 to 31st December 2017. A total of 351 haemorrhoid's patients were admitted in inpatient surgical ward during that period. The demographic details of all the patients were noted from the medical records.*

***Results**: A total 219 (62%) patients were male and 132 (38%) were females. Most of the patients are predominantly adults above the age of 21 years. The post-operative stay in hospital is almost less than 10 days as it indicates that most of the patients were discharged without any complication.*

***Conclusions**: The male patients are predominant compared to female patients. The surgical complications are less. The exact prevalence rate may be high as some patients may either undergo a self-treatment or native medicine treatment*

Keywords: *Haemorrhoid's, Haemorrhoidectomy, Prevalence, Post-operative stay*

1. Introduction

Haemorrhoid's, which is also termed as piles characterized by the enlarged and bulged blood vessels surrounding the supporting tissues present in the anal canal of an individual.[1] This condition may lead to prolapse of anal cushion that may lead to bleeding and pain.[2] This ailment is common among the adults.[3] The main cause of haemorrhoid's is considered to be constipation.4

The Haemorrhoid's are of two types: internal and external. The internal haemorrhoid's are painless because it originates above dentate line and are viscerally innervated. However, the external haemorrhoid's are painful as they originate below the dentate line and are somatically innervated.[5]

The prevalence of haemorrhoid's varies in different parts of the world.[6.7] This is because there are several contributing factors involved in haemorrhoid's and hence the prevalence varies from different geographical areas.[8]

The surgical interventions are needed in those cases of haemorrhoid's where there are continuous symptoms in spite of conservative or minimally invasive procedures. Apart from this, the surgery is the main choice of patients presenting with grade III and grade IV haemorrhoids.[9]

Further, the patients who present with strangulated internal haemorrhoid's needs the surgical interventions.[10] Specific choices of treatments depend on patients' age, severity of symptoms, and comorbidities.

In the present study, an attempt has been made to find the prevalence of haemorrhoid's and surgical management done in our geographical area.

2. Materials And Methods

The present study was retrospective, cross-sectional study from the period of 1st January 2013 to 31st December 2017. The study was done in Tagore Medical College Hospital, a tertiary care teaching hospital situated in Rathinamangalam village in Kancheepuram district of Tamil Nadu, India.

A total of 351 haemorrhoid's patients were admitted in inpatient surgical ward during that period. The demographic details of all the patients were noted from the medical records. Their bowel habits, dietary habits, amount of physical activity, were also noted.

All the patients were either in Grade II or Grade III internal haemorrhoid condition, attended outpatients and were admitted in surgical ward subsequently for the surgical management. All the patients were subjected to haemorrhoidectomy. Under spinal anaesthesia, sub- mucosal dissection of the pile masses was done and they were transfixed, ligated and excised. The patients were shifted to post-operative ICU for 24 hours and after that were kept in post-operative ward. They were observed for 3 days for defecation, spinal complications, haemorrhage and wound care.

Statistical Analysis

All the data were entered in the excel sheet and the data were subjected to descriptive statistics with SPSS vs 21 software.

3. Results and Discussion

A total of 351 patients undergone surgical interventions during the study period. Among which, 219 (62%) patients were male and 132 (38%) were females (Table 1). Year wise also the male patients are more compared to female patients except 2017. Thus, prevalence rate of haemorrhoid in the present study is more in males in this geographical area. Many studies have shown that the prevalence rate of haemorrhoid is high among males than that of females.[11] However, there is no evidence that the gender has any influence in the occurrence of haemorrhoid's. The current understanding is that men are more likely attend the hospital seeking for treatment, while women may not attend hospital with the hope that the haemorrhoid's will disappear on its own.

TABLE 1. Number of patients with haemorrhoid's admitted for surgical intervention.

Year	Total number of male patient	Total number of female patient	Total
2013	52 (82.5%)	11 (17.5%)	63
2014	69 (59%)	48 (41%)	117
2015	44 (73%)	16 (27%)	60
2016	30 (67%)	15 (33%)	45
2017	24 (36%)	42 (64%)	66
Total	219 (62%)	132 (38%)	351

Most of the patients are predominantly adults above the age of 21 years (Table 2). It was also evident that most of the patients belong above the age of 20. Only 1 patient below 10 years was admitted in 2016. Interestingly, 5 cases were above the age of 80 years. This finding clearly indicates that the haemorrhoids are common in the adults compared to paediatric age group. This finding is similar to many other such studies.[7,12,13]

TABLE 2. Age-wise distribution of haemorrhoid patients.

Year	Age group in years							
	0 to 10	11 to 20	21 to 30	31 to 40	41 to 50	51 to 60	61 to 70	71 and above
2013	0 (0%)	0 (0%)	14 (22%)	26 (41%)	10 (16%)	9 (14%)	3 (5%)	1
2014	0 (0%)	0 (0%)	11 (10%)	18 (15%)	32 (28%)	34 (34%)	22 (19%)	0
2015	0 (0%)	0 (0%)	8 (13%)	12 (20%)	7 (12%)	17 (28%)	12 (20%)	4
2016	1 (2%)	2 (5%)	6 (13%)	13 (30%)	7 (16%)	11 (25%)	4 (9%)	1
2017	0 (0%)	0 (0%)	6 (9%)	11 (18%)	9 (14%)	19 (29%)	19 (29%)	2
	1	2	45	80	65	90	60	8

The post-operative stay in hospital is almost less than 10 days as it indicates that most of the patients were discharged without any complication (Table 3). Only 11 patients presented with complications like infection, haemorrhage and stenosis. Recurrence was found in one patient. A total of 260 cases were Grade III haemorrhoid and 101 cases were Grade II haemorrhoid. 5 cases presented with Grade IV haemorrhoid with thrombosis and prolapse.

TABLE 3. Post-operative stay of haemorrhoid patients.

Year	Post-operative stay in days			
	0 to 10	11 to 20	21 to 30	31 and above
2013	44 (70%)	14 (22%)	5 (8%)	0
2014	87 (74.1%)	28 (24%)	2 (2.5%)	0
2015	44 (73%)	12 (20)	4 (7%)	0
2016	36 (80%)	9 (20%)	0 (0%)	0
2017	55 (83%)	11 (17%)	0 (0%)	0
	266 (76%)	74 (21%)	11 (3%)	0

The study is a retrospective study to find mainly the prevalence of haemorrhoid's and its surgical management. The study included only those patients who were hospitalised with the complaint of haemorrhoid for surgical interventions. Thus, the exact prevalence rate of haemorrhoid's in the community of our geographical area cannot be estimated.[14] All the patients admitted underwent haemorrhoidectomy, which is a common surgical intervention in many rural area.[15]

In the present study, the prevalence of haemorrhoid's was high in male compared to females. Many similar studies have shown the same results.[16-18] There is no scientific interpretation regarding the predominance in the male. However, many female patients hesitate to report to the hospital for the treatment of haemorrhoid and thus the recorded prevalence rate is less in them. Further, there is a poor awareness about the disease among the patients especially among the females. Hence, the prevalence rate in females is apparently shown less.

There are various surgical interventions for haemorrhoid's. However, in the present study conventional Milligan-Morgan haemorrhoidectomy technique was performed in all patients who reported with Grade III and Grade IV. On analyses, it was found that the patients did not have any severe complications and had a normal post-operative stay in the hospital. Further, only one case of recurrence and thus clearly indicates the success rate of the conventional haemorrhoidectomy.[19,20]

4. Conclusion

The present study has presented the prevalence of haemorrhoid's in the geographical area. Further, male patients are predominant than that of females. The exact prevalence rate may be high as some patients may either undergo a self-treatment or native medicine treatment. The surgical interventions in the patients were highly successful in the treatment of haemorrhoid's.

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References:

1. Stites T, Lund DP. Common anorectal problems. Semi Pediatr Surg. 2007;16:71-8.
2. Gordon PH, Nivatvongs S. Principles and practice of surgery for colon, rectum and anus. 1st ed. Quality Medical Publishing Inc;1992:1:10-38, 2:51- 62, 8:180-97.
3. Steele RJC, Campbell K. Disorders of the anal canal. In: Cuschieri SA, Steele RJC, Moossa AR, editors. Essential Surgical Practice. 4th ed. London: Arnold; 2002:634-7.
4. Navarra L, Pietroletti R, Maggi G, Leardi S, Simi M. Diagnosis and treatment of haemorrhoids in the eldery: results from 291 patients. Techniques in Coloproctology. 2000;3(3):127-30.
5. Alonso-Coello P, Mills E, Heels-Ansdell D. Fiber for the treatment of hemorrhoids complications: a systematic review and meta-analysis. Am J Gastroenterol. 2006;101(1):181-8.
6. Johanson JF, Sonnenberg, A. The prevalence of hemorrhoids and chronic constipation. An epidemiologic study. Gastroenterology. 1990;98:380-6.
7. Riss S, Weiser FA, Schwameis K, Riss T, Mittlböck M, Steiner G et al. The prevalence of hemorrhoids in adults. Int J Colorectal Dis. 2012;27(2):215-20.
8. Halverson A. Hemorrhoids. Clin Colon Rectal Surg. 2007 May;20(2):77-85.
9. Pattana-arun J, Wesarachawit W, Tantiphlachiva K, Atithansakul P, Sahakitrungruang C, Rojanasakul A. A comparison of early postoperative results between urgent closed hemorrhoidectomy for prolapsed thrombosed hemorrhoids and elective closed hemorrhoidectomy. J Med Assoc Thai. 2009;92(12):1610-5.
10. Nienhuijs S, de Hingh I. Conventional versus LigaSure hemorrhoidectomy for patients with symptomatic Hemorrhoids. Cochrane Database Syst Rev. 2009;(1):CD006761.
11. Ali SA, Shoeb MFR. Study of risk factors and clinical features of hemorrhoids. Int Surg J. 2017;4:1936-9.
12. Kaidar-Person O, Person B, Wexner SD. Hemorrhoidal disease: A comprehensive review. J Am Coll Surg. 2007;204:102-17.
13. Lee JH, Kim HE, Kang JH, Shin JY, Song YM. Factors associated with hemorrhoids in korean adults: korean national health and nutrition examination survey. Korean J Fam Med. 2014;35:227-36.
14. Ganz RA. The Evaluation and Treatment of Hemorrhoids. Clin Gastroenterol Hepatol. 2013;11:593-603.

15. Navarra L, Pietroletti R, Maggi G, Leardi S, Simi M. Diagnosis and treatment of haemorrhoids in the eldery: results from 291 patients. Techniques in Coloproctology. 2000;3(3):127-30.
16. Kim HS, Baik SJ, Kim KH. Prevalence of and risk factors for gastrointestinal diseases in Korean Americans and native Koreans undergoing screening endoscopy. Gut Liver. 2013;7:5539-45.
17. Chen JS, You JF. Current status of surgical treatment for hemorrhoids-systematic review and meta-analysis. Chang Gung Med J. 2010;33:5488- 500.
18. 18. Chen CW, Lai CW, Chang YJ. Results of 666 consecutive patients treated with LigaSure hemorrhoidectomy for symptomatic prolapsed hemorrhoids with a minimum follow-up of 2 years. Surgery. 2013;153:2211-8.
19. Barron J. Office ligation of internal hemorrhoids. Am J Surg. 1963;105:563-70.
20. Shanmugan V, Thaha MA, Rabindranath KS, Campbell KL, Steele RJC, Loudon MA. Rubber band ligation versus excisional haemorrhoidectomy for haemorrhoids. Cochrane Database Syst Rev. 2005;20(3):CD005034.