

USE OF DIFFERENT HAEMORRHOIDECTOMY METHODS AND A GENERAL ASSESSMENT OF POST-OPERATIVE VALUES.

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Annotation: My knowledge

Hemorrhoids is one of the most common health problems faced by internists, as the definition and aetiology are discussed, and hemorrhoids is often a difficult condition in our daily practice.

Goal

This research aims to use different methods of hemorrhoidectomy and general evaluation of postoperative values of Iraqi patients.

Materials and method

In this study, 90 hemorrhoidal patients who agreed to participate in the study were recruited.

An observational, descriptive, and retrospective study was conducted on patients with hemorrhoids using data collected from several different hospitals in Iraq from July 2021 to November 2021.

A questionnaire was designed by expert physicians for patients with hemorrhoids group from the Ministry of Public Health, a database was created using Microsoft Access, statistical analysis was performed using IBM SOFT SPSS 22 for Windows, and the final document was prepared with Microsoft Office package.

Consequences

The result found in this study is 90 patients were collected and divided into two groups (open 40 and closed 50) between the ages of 20 to 60 years.

In this study, the ASA score was relied upon for the purpose of measuring the type of process pattern. In addition, it was relied on to classify the degrees of pain and complications that cause by Iraqi patients. Weak results were found in the open group, more than 0 in the closed group, where a statistically significant relationship of 0.041 was found.

Conclusion

We conclude from this study that closed-type operations are better than open-type in stopping bleeding and closing the wound in the anus in the future of the patient.

Keywords: Haemorrhoidectomy, Opened, Closed, Post-operative values

INTRODUCTION

Often, not only middle-aged and elderly people but also young people come to see our proctologists. A healthy working population, faced with a diagnosis, is often concerned. [1]

The cause of the pathological increase in haemorrhoids is an acute or chronic circulatory disorder in the cavernous formations of the hemorrhoidal venous plexus of the lower ampullary rectum. Along with circulatory disorders in the development of haemorrhoids, atrophic changes in the ligamentous apparatus of haemorrhoids (the so-called Parkes ligaments) play an important role. [2]

Under the influence of these factors, haemorrhoids increase in size and shift in the distal direction, while atrophic processes in the retention apparatus increase and haemorrhoids begin to fall out of the anal canal. [3] The development of dystrophic processes in the common longitudinal muscle of the submucosal layer of the rectum and in the Parkes ligament, which holds the cavernous bodies in the anal canal, leads to a gradual but irreversible displacement of the haemorrhoids in the distal direction. [4]

Patient visit statistics show that people over 35 years of age and young adults are prone to haemorrhoids. The number of male patients is several times greater than the number of females one. Pregnancy and childbirth often lead to the development of haemorrhoids in women. There is also a family history of haemorrhoids and vein problems. [5] Men,

when going to an appointment with a proctologist, indicate a lack of physical activity, the presence of bad habits, and abuse of heavy food, which leads to constipation. [6]

The presence of a symptom that appears to the patient than if there is no outflow of blood from the veins of the small pelvis, stagnation occurs, which, under pressure, stretches the walls of the vessels - hemorrhoidal pockets are formed, which for the patient look like bumps or knots. [7] The second factor provoking the appearance of haemorrhoids is a violation of the work of the gastrointestinal tract, which leads to an increase in intra-abdominal pressure. The development of haemorrhoids is also affected by diarrhea or constipation, which forces efforts to defecate. [8,9,10]

For patients with the hemorrhoidal disease, the prospect of death is not so terrible. [11] The disease itself is not fatal. Haemorrhoids are quite capable of running a person's quality of life, and if you put off visiting a proctologist regularly and don't follow the recommendations, you can easily suffer from complications. The most common consequences of a neglected hemorrhoidal problem are serious bleeding, prolapse of the glands of the rectal canal with subsequent infringement, and non-healing anal fissures. [12]

A person experiences discomfort when going to the toilet; he cannot sit still, and tension leads to an increase and loss of bumps, which hurt when they encounter linen. [13]

The real threat lies in the complications of haemorrhoids, which spread to nearby tissues and organs - and can now easily increase the risk of death if the patient does not seek help in time.

Hemorrhoidal thrombosis, anemia due to regular severe blood loss, necrosis of suffocating areas of the veins with hemorrhoidal cavities, gangrene of the pelvic organs, inflammatory processes in the rectum - proctitis, hemiparesis - an inflammatory process in the pelvis that turns into a purulent form. [14]

This paper aims to Use of different haemorrhoidectomy methods and a general assessment of post-operative values. [15].

MATERIAL AND METHOD

Collection sample

An observational, descriptive, and retrospective study on 90 patients with haemorrhoidectomy was conducted with data collected from several different hospitals in Iraq from July 2021 to November 2021, where this study is specialized in patients with haemorrhoids in the third and fourth degree.

In this study, 90 haemorrhoidectomies for Iraqi patients who agreed to participate in the study were recruited.

Method

A specific questionnaire was applied to 90 patients between the ages of 20 and 60 from July 2021 to November 2021. Several different hospitals.

Exclusion criteria included patients with a history of haemorrhoidectomy in Iraqi patients whose partner was diagnosed as anesthetized. Additionally, this study applies to females and males.

This study was divided according to the results of the open and closed types of surgery, as it was built based on age, Sex, Material status, Economy Level, Symptoms, ASA%, and Family history.

Ethical approval

Ethical and scientific rules have been considered to collect patient demographic data and information that are based on internationally accepted guidelines to preserve the rights, safety, and health of patients participating in this study. The autonomy of the patient and consent to provide the requested information, as well as the confidentiality of personal data, were also respected.

To apply the techniques and methodological procedures, permission and approval were received from the implementing authorities for the purpose of create this study.

RESULTS

Table 1- Characterises demographic results of patients.

Variables	Open (N=40)	Closed (N=50)	P-value
Age, N (%)			
20-35	15 (37.5%)	19 (38%)	0.049

36-45	13 (32.5%)	17 (34%)	0.048
46-60	12 (30%)	14 (28%)	0.0495
Sex			
Male	23 (57.5%)	27 (54%)	0.042
Female	17 (42.5%)	23 (46%)	0.046
Material status			
Married	13 (32.5%)	16 (32%)	0.0496
Divorced	12 (30%)	16 (32%)	0.0478
Single	15 (37.5%)	18 (30%)	0.0385
Economy Level			
Low	14 (35%)	15 (30%)	0.042
Moderate	17 (42.5%)	21 (42%)	0.049
High	9 (22.5%)	14 (28%)	0.043
Symptoms			
Anal itching	9 (22.5%)	11 (22%)	0.05
Hard lumps near the anus that feel tender or tender	6 (15%)	9 (18%)	0.0496
Pain or soreness in the anus, especially when sitting	11 (27.5%)	12 (24%)	0.041
Rectal bleeding	6 (15%)	13 (26%)	0.037
Anal itching	8 (20%)	5 (10%)	0.034
ASA%			
I	14 (35%)	16 (32%)	0.046
II	10 (25%)	12 (24%)	0.049
III	16 (40%)	22 (44%)	0.046
Family history			
Yes	30 (75%)	45 (90%)	0.035
No	10 (25%)	5 (10%)	0.033

Fig 1- Describe the general complications to patients who underwent haemorrhoidectomy.

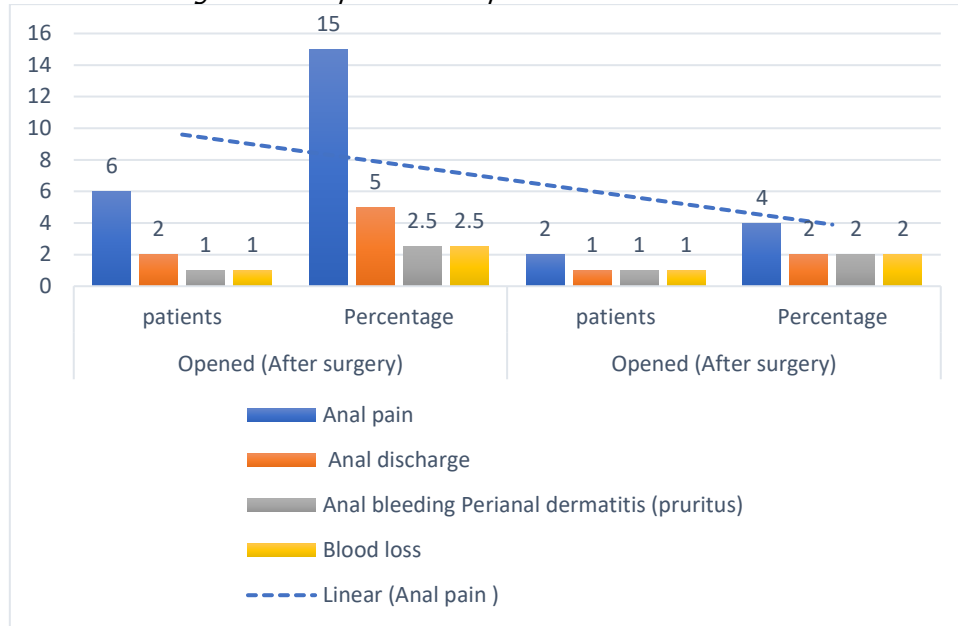


Table 2- Logistic regression for a patient-risk factors analysis.

Parameters	Open	Closed	P-value
Age			
20-35	0.83 (0.7-1.1)	0.78 (0.6-1.0)	0.66
36-45	1.12 (0.86-1.2)	1.2 (0.7-1.2)	0.98
46-60	1.22 (0.98-1.66)	1.3 (1.0-1.5)	0.075
Anal itching	2.66 (1.9-5.5)	1.87 (1.4-2.5)	0.026
Pain or soreness in the anus, especially when sitting	1.36 (1.1-2.4)	1.42 (1.1-1.8)	0.01
Anal itching	4.4 (3.1-8.9)	1.3 (0.9-1.8)	0.04
Rectal bleeding	6.3 (3.1-8.9)	1.7 (0.9-1.8)	0.042

Table 3- Assessments of the degree of pain of patients.

Degree pain	of Opened (N=40)	%	Evaluation	Closed (N=50)	%	Evaluation
0-2	3	7.5	Dull pain	1	2	Dull pain
2-4	3	7.5	Dull pain	2	4	Dull pain
4-6	2	5	Dull pain	1	2	Dull pain

6-8	1	2.5	Medium pain	2	4	Medium pain
8-10	1	2.5	severe pain	1	2	severe pain

Table 4- Estimation of the correlation of outcomes with the type of surgery.

Variable	Outcomes	Open	Closed
R correlation	1/0	+0.64	-0.23
Sig	--	0.041	0.6
N		90	

DISCUSSION

Haemorrhoids are specialized and highly vascularized, forming discrete masses of thick sub-mucosa containing blood vessels, smooth muscles, and elastic and connective tissues limited to the anal canal and perianal area. [16]

Many of the reported benefits of the harmonic scalpel in hemorrhoidal surgery include less drying, less wood formation, improved wound healing, and reduced postoperative pain. In many of these studies, the condition of the mucosal defect following excision was not addressed. However, previous authors have compared open and closed methods of haemorrhoidectomy after excision using electrocautery and scissors. Although the merits of the two methods are still somewhat controversial, there are still strong opinions on both sides. Proponents of the open method cite shorter surgical times, less pain in the early postoperative period, and less surgical morbidity. They also assert that leaving the mucosa open allows the free drainage of serous fluid and reduces postoperative infections.

In this study, 90 patients were collected in Iraq and distributed according to the type of operation on Iraqi hemorrhoid patients in terms of age, weight, diseases, economic level, and ASA classification.

The most common ages in this study were from 20-60 out of 90, where the cases were opened (40) and closed (50). According to the ASA index ratio, the number of high-risk patients ranged between open 7 (35%), 26 (32.5%) I, and closed 8 (40%), 32 (40%) II, as shown in Table 1.

This study is of great interest both in the clinical practical field and in the theoretical field because, thanks to this, we have a better insight into the determinants that may be associated with hemorrhoids.

An important economic aspect was found to be associated with hemorrhoids in patients over the age of 22, a finding like the Eileen studies. [17]

Russell CR 2010 that also found an association between the type of operation and those with hemorrhoids, determined that 75% of hemorrhoid patients under anesthesia between the ages of 22 and 60 years had more pain after surgery in the open than in the closed, affecting the anus and thus causing Bleeding in the open more than closed in some cases. [18]

In the same way, Enrique and Rimal determined that patient age was a risk factor associated with Anastasia during hemorrhoidal surgery, with a value of $p < 0.05$. [19], [20]

An observational study of 60 patients in the United States found severe bleeding in some cases of the open type, causing massive clotting bleeding.

CONCLUSION

A mucosal defect left closed after haemorrhoidectomy with a harmonic scalpel significantly reduces operative time and, thus, operative costs without reducing the quality of life. In cases involving the harmonic scalpel where there is no overt bleeding, our data would support leaving the mucosa in closed processes as a safe and effective practice, according to the present results of the closed type.

The closed type of anesthesia approach aims to provide patient safety behaviors and lower pain scores than the closed type, which is why appropriate pre-anesthesia assessment and an early anesthesia approach are essential to prevent complications. Closed-type techniques can provide an improvement in the circulatory pattern, including an improvement in blood pressure numbers.

Regarding outcomes most closely associated with closed type and hemorrhoids, The long-term effects of anesthetics on a patient's cognitive function are not known. When using general or specific anesthesia, this should be considered the high blood pressure, especially in those patients whose hemorrhoids are large for some patients during anesthesia.

REFERENCES

1. Bernstein w What are hemorrhoids, and what is their relationship to the portal venous system? *Dis colon rectum* 1983;26:829-.
2. Cataldo Palestinian Authority Andmaser WP current surgical treatment. 4, p218-22. Edited by Cameron JL St. Louis, MO, Mosby-Yearbook,1992.
3. Carapeti EA, Kamm MA, McDonald PJ, Phillips RK Double-blind randomized controlled trial of the effect of metronidazole on pain after day-case hemorrhoidectomy. *Lancet* 1990; 351: 169-72.
4. Pfenninger J Modern treatments for internal hemorrhoids: scalpel surgery is now rarely needed. *Br With J* 1997; 314:1211-2.
5. Mehigan BJ Stapling procedure for haemorrhoids versus Milligan-Morgan haemorrhoidectomy: randomised controlled trial. *Lancet* 2000;355:782-5.
6. Khan S, Pawlak SE, Eggenberger JC, et al. Surgical treatment of hemorrhoids: prospective, randomized trial comparing closed excisional hemorrhoidectomy and the Harmonic Scalpel technique of excisional hemorrhoidectomy. *Dis Colon Rectum* 2001;44:845-9.
7. Partridge LM, Bartalucci B, Benzini L, Borri A, Catharsis S, Coronation K Early and late (ten years) experience with circular stapler hemorrhoidectomy. *Dis Colon Rectum* 2001;44:836-41.
8. Schwartz RO Total laparoscopic total hysterectomy with the harmonic scalpel. *J Gynecol Surg* 1994; 10: 33-4.
9. McCarus S Physiologic mechanism of the ultrasonically activated scalpel. *J Am Assoc Gynecol Laparosc* 1996;3:601-8.
10. Google Scholar Crossref PubMed WorldCat
11. Armstrong DN, Ambrose WL, Schertzer ME, Orangio GR Harmonic scalpel vs. electrocautery hemorrhoidectomy: a prospective evaluation. *Dis Colon Rectum* 2001;44:558-64.
12. Chung CC, Ha JP, This JP, Tsang WW, Li MK Double-blind, randomized trial comparing Harmonic scalpel hemorrhoidectomy, bipolar scissors hemorrhoidectomy, and scissors excision. *Dis Colon Rectum* 2002;45:789-94.
13. Gencosmanoglu R, Sad O, Koc D, Inceoglu R Hemorrhoidectomy: open or closed technique: a prospective, randomized clinical trial. *Dis Colon Rectum* 2002; 45:70-5.
14. Arbman G, Crook H, Aspen Cape S Closed vs. open hemorrhoidectomy—is there any difference? *Dis Colon Rectum* 2000;43:31-4.
15. Milligan ETC, Morgan CN, Jones THE, Officer R Surgical anatomy of the anal canal and the operative treatment of haemorrhoids. *Lancet* 1937; ii: 1119-24.
16. To YH, Seow-Choen MT, Leong OF Randomized controlled trial of open and closed haemorrhoidectomy. *Br J Surg* 1997;84:1729-30.
17. LEE K.C., LIU C.C., HU W.H., LU C.C., LIN S.E., and CHEN H.H.: Risk of delayed bleeding after hemorrhoidectomy. *International journal of colorectal disease*, 34 (2): 247-253, 2019.
18. POKHAREL N., CHHETRI R.K., MALLA B., JOSHI H.N., and SHRESTHA R. K.: Hemorrhoidectomy: Ferguson's (closed d) Vs. Milligan -- Morgan's technique (open). *Nepal Med. Coll. J.*, 11 (2): 136-7, 2009. 8-KHUBCHANDANI I.T.: Internal sphincterotomy with hemorrhoidectomy does not relieve pain.
19. *Diseases of the colon & rectum*, 45 (11): 452-1457, 2002. 9- NG K.S., HOLZGANG M., and YOUNG C.: Still a case of "no pain, no gain"? An updated and critical review of the pathogenesis, diagnosis, and management options for hemorrhoids in 2020.
20. *Annals of Coloproctology*, 36 (3): 133, 2020. 10- PATTANAYAK S., KUMAR M., PATRO S.K., and BEHERA M.K.: Plication: An innovative method of treating piles. *International Surgery Journal*, 6 (11): 4056-4061, 2019.