

Long-Term Results with Hemorrhoidectomy THD in Disease Hemorrhoidal

Gonzalez QH*, De Jesus-Mosso M, Bahena-Aponte JA, Hernandez-Martinez MV¹ and Mejja-Arcadia JA

Department of Gastrointestinal and Colorectal Surgery, Humanitas Medical Group Coyoacan Hospital, Mexico City

***Corresponding author:**

González QH,
Humanitas medical Group
Coyoacán, Árbol de Fuego 80, Col. El Rosario,
PC 04380, Mexico, Tel: 5567259092, 5513536641,
E-mail: quinhec@hotmail.com

Received: 11 Jan 2022
Accepted: 31 Jan 2022
Published: 04 Feb 2022
J Short Name: JJGH

Copyright:

©2022 González QH. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and build upon your work non-commercially.

Citation:

González QH, Long-Term Results with Hemorrhoidectomy THD in Disease Hemorrhoidal. Japanese J Gastro Hepato. 2022; V8(5): 1-3

Keyword:

Hemorrhoidal; Transanal Hemorrhoidal Dearterialization; Anoscopy

1. Abstract

1.1. Objective: To analyze prospectively a series of 300 cases of hemorrhoidal disease managed with transanal hemorrhoidal dearterialization guided by Doppler ultrasound (THD)

1.2. Material and Methods: During the months of May 2011 to June 2019 a total of 300 patients were included with an average age of 43 years, (3%) were diagnosed with hemorrhoidal disease grade II, grade III (15%), grade IV (10%) and mixed hemorrhoidal disease (72%), predominantly male (57%), which were treated with THD; surgical time, intensity of postoperative pain, recurrence, recovery time and time of return to work were analyzed.

1.3. Results: The average age was 43 years, with a predominance of 57% male, the predominant symptoms before surgery were 100% bleeding, 79% prolapse and 60% pruritus, 3% had Grade II hemorrhoids, 15% grade III, 10% Grade IV and 72% mixed hemorrhoids, the average surgical time of the surgery was 15.9min (range 15-20 min), 1 day hospital stay (100%), 2.3% presented urinary retention, in The VAS scale at day 1 patients presented a value of 4 (range 2-7), at day 7 a value of 2 and at day 30 a value of 0 in all patients, the recovery time on average was 10 days and return to work in 14 days (range 10-20 days), recurrence of 3%, 10 patients It is presented evidence of new external flaps.

1.4. Conclusion: This study shows that patients treated with THD hemorrhoidectomy adequately manage the disease with low recurrence rate and less postoperative pain as well as complications.

2. Introduction

Hemorrhoidal disease is a very frequent pathology and there are new minimally invasive treatments that favor surgical results. Hill-Fergu-

son hemorrhoidectomy has long been the treatment of choice for surgical management of hemorrhoids, however, there is a significant risk of postoperative complications with this technique, [1] such as postoperative pain, therefore a surgical technique is introduced Non-excisional known as Transanal Hemorrhoidal Dearterialization (THD) consisting of ligation of the distal branches of the superior rectal artery guided by a Doppler transducer and mucopexia of the mucosa and submucosa, maintaining the anatomical integrity of hemorrhoids, as a safe and safe alternative effective, associated with low risk of complications, less pain [2] and that can be performed on an outpatient basis [3, 4], reserved for selected patients managing to resolve symptoms and minimize recurrent disease when performed correctly, therefore, patients with grade III or IV hemorrhoids and those with severe external disease, seem to benefit more s of this technique [5].

We present this study to evaluate the surgical results obtained during 8 years of experience using transanal hemorrhoidal dearterilización (THD).

2.1. Objective:

The objective of this study is to perform a retrospective analysis of 300 cases of hemorrhoidal disease treated with THD hemorrhoidectomy demonstrating its efficacy and the low risk of complications.

3. Material and methods

A retrospective study was conducted in patients refractory to conservative treatment undergoing transanal hemorrhoidal dearterilization (THD) in a sample of 300 patients, in a period from May 2011 to June 2019 who signed an informed consent to undergo the procedure explaining the treatment alternatives and the complications of the technique.

3.1. Patients

A total of 300 patients were included, with a diagnosis of hemorrhoidal disease, the average age was 43 years (range 19-71), with a male predominance of 57% (n = 171), the patients were selected according to clinical symptoms and physical examination that confirmed the presence of hemorrhoids through an anoscopy identifying the extent of the disease.

All patients with internal GI hemorrhoids, pregnancy and hemorrhoidal thrombosis were excluded.

The equipment used was the transanal hemorrhoidal dearterialization kit which includes an anoscope with a doppler sensor, suture and needle holder.

The patients were treated in several private third level hospitals predominantly in HMG Coyoacán hospital, surgical time, intensity of postoperative pain with the analog visual scale, recurrence, recovery time and return time to work were analyzed, we obtained mode, median and average.

3.2. Surgical technique

On admission of the patients, a single dose rectal enema was administered. The patients were treated with spinal block in most cases and under general anesthesia, with the patient in a Sevillian knife position, an anoscope is placed and under the Doppler guide Locate the pulse of the six terminal arteries at positions 1,3,5,7,9 and 11 clockwise and ligature 3cm above the dentate line is performed with a 2-0 vicryl absorbable suture, performing mucopexia to reduce prolapse by placing a nearby z-shaped suture point.

3.3. Postoperative control and follow-up

The pain was controlled with paracetamol 750 mg three times a day, alternated with ketorolac 10mg three times a day, in 5 patients the combination of paracetamol / tramadol 37.5mg was used every 8 hours, all patients received prophylaxis with metronidazole 500 mg IV three dose and subsequently 5 days orally, a laxative (macrogol) and a healing agent (ketanserin with benzocaine) were used during the first postoperative period, recurrence of 3.3%, 10 patients presented evidence of new external flaps

Follow-up appointment was scheduled at 7 and 30 days postoperatively and later at 6 months.

4. Results

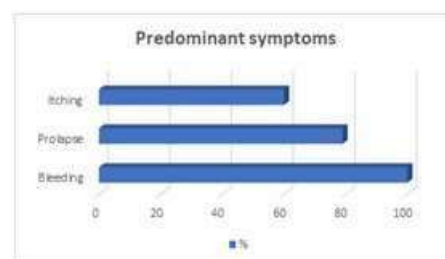
A total of 300 patients were included in a retrospective study, with a male predominance of 57% (n = 171), 43% of the female gender (n = 129), with a diagnosis of hemorrhoidal disease, 3% (n = 9) presented GII hemorrhoids, 15% (n = 45) GIII hemorrhoids, 10% (n = 31) had GIV hemorrhoids and 72% (n = 215) mixed hemorrhoids, the most frequent preoperative symptom was rectorrhagia in 100% of patients, followed by 79% prolapse and pruritus in 60%. (Table 1, table 2 and Graph 1).

Table 1: Demographic data

DEMOGRAPHIC	%
AGE	43 (19-71)
SEXO	
FEMALE	43 (129)
MALE	57 (171)

Table 2: Diagnosis and symptoms

DIAGNOSIS	
GII	3
GIII	15
GIV	
MIXED	10
	72
SYMPTOMS BEFORE SURGERY	
Bleeding	
Prolapse	100
Itching	79
	60



Graph 1: shows the predominant symptoms before surgery

The surgical time of the procedure was 15.9 min (range 15-20 min), 1 day hospital stay (100%), 2.3% presented urinary retention, on the visual analogue scale (VAS) at day 1 the patients presented a value of 4 (range 2-7 DS: 0.4), at day 7 a value of 2 (range 1-2 DS: 0.2) and at day 30 a value of 0 in all patients, the average recovery time was 10 days range (7-14) and return to work in 14 days (range 10-20 days), after a six-month follow-up, only 10 patients presented new external flaps, recurrence 3.3%. Table 3 and 4

Table 3: Intraoperative Results

INTRAOPOERATIVE AND PERIOPERATIVE RESULTS	
SURGERY TIME	15.9 min (15-20)
HOSPITAL STAY	1 day
URINARY RETENTION	2.30%
EXTERNAL FLAPS	3.30%

Table 4: Postoperative results

POSOPERATIVE RESULTS	
VAS	
DAY 1	4 (2-7)
DAY 7	2
DAY 30	0
AVERAGE RECOVERY	10 DAYS(7-14)
RETURN TO WORK	14 DAYS (10-20)

5. Discussion

The surgical treatment of hemorrhoidal disease has been much discussed in recent years, although hemorrhoidectomy has been the treatment of choice, there are complications associated with this procedure that can affect the quality of life, so new procedures have been

created that Surgical results improve in terms of postoperative pain and recovery time, including transanal hemorrhoidal dearterialization (THD), which is considered a safe and minimally invasive technique, which offers very good results in the control of symptoms, although There is evidence that recurrence is greater, in our series, we found a low recurrence rate and better control of postoperative pain [6,7].

Some prospective and retrospective studies have shown that THD is an effective and safe procedure, with 97% success rates and good surgical results with an average follow-up of 9 months and although there are few long-term results. Other articles compare THD with other procedures. with almost similar recurrence rates [8-10].

THD complications are rare and can be managed on an outpatient basis, compared to conventional hemorrhoidectomy, THD showed less pain, less hospital stay and early return to work, in our study we can confirm these results. Rato et al. publish good results in grade IV hemorrhoids using THD, with significant improvement in symptoms [11-14].

Carlo Ratto et al show that there is a significant reduction in prolapse in more than 90% of treated patients, long-term follow-up showed that the results were consistent over time, observing one more advantage when using THD; allowing the precise application of suture in the area above the dentate line reduces the risk of postoperative pain and complications, requiring less postoperative analgesia [15].

6. Conclusions

In the present study we demonstrated that patients treated with THD hemorrhoidectomy present an adequate management of the disease due to THD being a safe and effective technique that allows a low recurrence rate and less postoperative pain as well as less complications.

References

1. Ganz Robert A. The evaluation and treatment of hemorrhoids: a guide for the gastroenterologist. *Clin Gastroenterol Hepatol*. 2013 Jan;11(6):593-603.
2. Felice George, Privitera Antonio, Ellul Ernest, Klaumann Maria. Doppler-guided hemorrhoidal artery ligation: an alternative to hemorrhoidectomy. *Dis Colon Rectum*. 2005 Nov;48(11):2090-3.
3. Scheyer Matthias, Antonietti Elisabeth, Rollinger Gerd, Mall Helene, Arnold Steffen. Doppler-guided hemorrhoidal artery ligation. *Am J Surg*. 2006 Jan;191(1):89-93.
4. Ratto Carlo, Donisi Lorenza, Parello Angelo, Litta Francesco, Doglietto Giovanni Battista. Evaluation of transanal hemorrhoidal dearterialization as a minimally invasive therapeutic approach to hemorrhoids. *Dis Colon Rectum*. 2010 May;53(5):803-811.
5. Brown Steven R, Tiernan James P, Watson Anjus JM, et al. Haemorrhoidal artery ligation versus rubber band ligation for the management of symptomatic second-degree and third-degree haemorrhoids (HUBLe): a multicentre, open-label, Randomised controlled trial 2016 Jul 23;388(10042):356-364.
6. Rubbini Michele, Tartari Valerio. Doppler-guided hemorrhoidal artery ligation with hemorrhoidopexy: source and prevention of postoperative pain. *Int J Colorectal Dis*. 2015 May;30(5):625-630.
7. Pol Robert A, van der Zwet Will C, Hoornenborg Daniel, Babbeth Makkinga et al. Results of 244 consecutive patients with hemorrhoids treated with Doppler-guided hemorrhoidal artery ligation. *Dig Surg*. 2010;27(4):279-84.
8. Sohn N, Aronoff J S, Cohen FS: Transanal hemorrhoidal dearterialization is an alternative to operative hemorrhoidectomy. *Am J Surg* 2001 Nov;182(5):515-9.
9. Scheyer Matthias, Antonietti Elisabeth, Rollinger Gerd, Helene Mall, Steffen Arnold: Doppler-guided hemorrhoidal artery ligation. *Am J Surg* 2006 Jan;191(1):89-93.
10. Abudeeb, H., Ugwu, A., Darabnia, J., Hammad, A., Khan, K. THD and mucopexy: Efficacy and controversy. *Annals of medicine and surgery* 2012; 21: 89-92.
11. C. Ratto, P. Giordano, L. Donisi, A. Transanal haemorrhoidal dearterialization (THD) for selected fourth-degree haemorrhoids *Tech Coloproctol*, 15 (2011), pp. 191-197.
12. Hoyuela C, Carvajal F, Juvany M, et al. HAL-RAR (Doppler guided haemorrhoid artery ligation with recto-anal repair) is a safe and effective procedure for haemorrhoids. Results of a prospective study after two-years follow-up. *Int J Surg*. 2016; 28: 39-44.
13. Qarabaki MA, Mukhashavria GA, Mukhashavria GG, Circular vs. three-quadrant hemorrhoidectomy for end-stage hemorrhoids: short- and long-term outcomes of a prospective randomized trial. *J Gastrointest Surg*. 2014; 18: 808-15.
14. Consalvo V, D'Auria F & Salsano V. Transanal Hemorrhoidal Dearterialization With Doppler Arterial Identification Versus Classic Hemorrhoidectomy: A Retrospective Analysis of 270 Patients. *Annals of coloproctology*. 2019; 35(3): 118-122.
15. Ratto C, Campenni P, Papeo F. et al. transanal hemorrhoidal dearterialization. (THD) for hemorrhoidal disease: a single center study on 1000 consecutive cases and review of the literature, *Tech Coloproctol*. 2017; 21: 953.