

Hemorrhoidectomy without Sutures. A New Surgical Technique!

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Abstract

Background: Hemorrhoidal disease is one of the most frequent ano-rectal pathologies and is defined as the clinical picture of foreign body sensation, anal pain indifferent to evacuation, rectal bleeding, scarce rectal bleeding and anal itching, all secondary to „Arterio-venous dilatations of mesenchymal tissue“, located in the anal canal and in the margin of the anus; Its diagnosis is clinical and its treatment is still these days, multiple or very varied and sometimes even controversial. Most patients opt for „conservative“ management, although surgical management is always latent.

Objective: To analyze the results obtained, morbidity, mortality, complications, recurrence or recurrence in the colon and rectum surgery services in the surgical treatment of hemorrhoidal disease.

Patients and Methods: All the files of patients operated on for hemorrhoidal disease in the Colon and Rectum Surgery service from May 2005 to May 2017 in four different hospitals were reviewed.

Results: There were 1,168 patients in total, 734 of the female sex and 424 of the male sex, ages of 18 to 76 years; the time of evolution with the hemorrhoidal disease was from one week to 25 years. Only the surgical procedure of hemorrhoidectomy without suture was carried out in all cases, with one day of hospital stay, with no morbidity and mortality; follow-up after a year to the surgical event.

Conclusions: Hemorrhoidectomy without suture is an effective surgical technique, with a high degree of safety and as a definitive solution for this proctological pathology. And it must be considered for its diffusion and application as an excellent therapeutic alternative.

Keywords: Disease; Hemorrhoidal; Hemorrhoidectomy; Surgical; Recurrence; Colon; Rectum; Incontinence; Stenosis

Introduction

Hemorrhoidal disease (HD) is one of the most frequent ano-rectal pathologies, and is defined as the clinical picture of foreign body sensation, anal pain indifferent to evacuation, rectal bleeding, scarce rectal bleeding and anal itching, all of which secondary to the „arteriovenous dilatations of mesenchymal tissue”, located in the anal canal and in the margin of the anus; Its diagnosis is clinical and its treatment is still these days, multiple or very varied and sometimes even controversial [1].

Since antiquity it is recorded that Hippocrates in the year 400 AC, treated the EH with a hot iron; in ancient Egypt the pharaohs had specific people called „the guards of the anus” [1].

Most patients opt for „conservative” management, although surgical management is always latent [2]. EH is still a challenge with regard to its treatment and it is estimated that 80% of the treatments are only symptomatic, due to the fear of pain and the consequent complications of surgery [1]. There is a great variety in the type of surgical treatment for this disease, that is why the purpose of this work is to analyze the results obtained, complications, mortality and recurrence in a colorectal surgery service; it is also necessary to emphasize that the premises of the surgical treatment of this pathology that must be avoided are: postoperative pain, operative hemorrhage, fecal incontinence, recurrence and anal stenosis; considering that if it is done, it would be an ideal medical-surgical practice.

Patients and Methods

The study had a longitudinal, retrospective, observational and descriptive design. We review the records of all patients treated surgically for clinically expressed HD of mixed internal and external components G I, II, III, IV and skin flaps, in the Colon and Rectum Surgery services of four hospitals that are:

1. High Specialty Medical Unit National Medical Center the «Race» General Hospital «Dr. Gaudencio González Garza» of the Mexican Institute of Social Security. Mexico City. Country: Mexico.
2. Hospital of Specialties of the City of Mexico «Dr. Belisario Domínguez» of the Ministry of Health. Mexico City. Country: Mexico.
3. Hospital General «Dr. Rubén Leñero» of the Ministry of Health. Mexico City. Country: Mexico.
4. Hospital Metropolitan City of Mexico City. Mexico City. Country: Mexico.

With a study period from May 2005 to May 2017. Age, sex, surgical and pathological history, time of evolution of the HD, surgical risk according to ASA classification, surgical time, days were obtained from each file. of hospital stay, complications and recurrence. With a follow-up of patients a week, a month, three months to six months and a year. The study of the results of the procedure using descriptive statistics.

Surgical technique of hemorrhoidectomy (HSS) without sutures

Previous anesthesia with epidural block in the Kraske position or Sevillian knife, with separation of the gluteal area, the hemorrhoidal disease is exposed, see figure 1. An anoscopy is performed with bivalve separator of Prats, complex clamp or hemorrhoidal package (internal and external) on the upper edge of the external component referring it, see figure 2. With the electro-scalpel, electrocautery or electric scalpel, with coagulation 60 and cut in 60 (25 and 25 depending on the model); marking with the modality of cutting of the area of the tissue to be resected in elliptical form is started as soon as possible, then with the coagulation modality, section of the hemorrhoidal complex is made at the level of the internal anal sphincter as the anatomical and surgical limit, see figure 3 resection is completed in all quadrants, EH I and II are only electrofulgured, not resected, eliminating all types of disease both internally and externally, cutaneous flaps are removed with the hybrid action of cutting and coagulation; all that is dried or coagulated a scarce amount of sterile water is applied to fix the heat reaction, thus reinforcing the bloody area with no bleeding. Hemostasis is verified and an external patch with gauze is placed concluding surgical procedure.



Figure 1: Mixed hemorrhoidal disease.

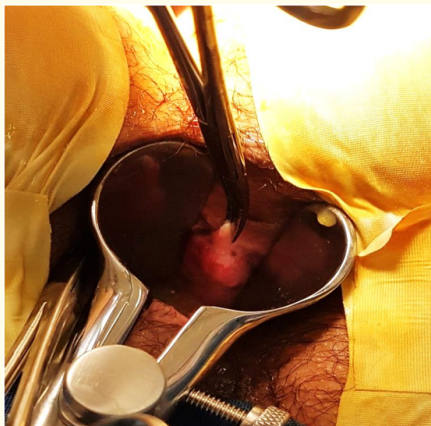


Figure 2: Reference of the hemorrhoid component.

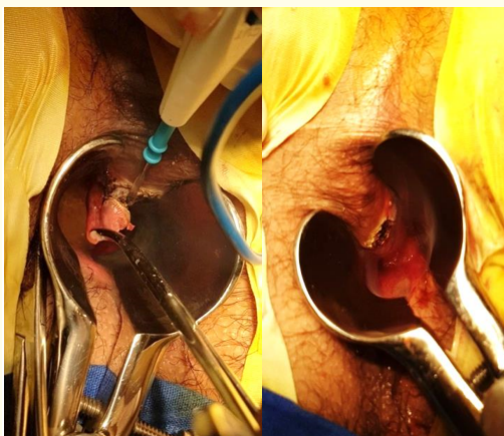


Figure 3: Resection of hemorrhoid disease.

Results

There were 1, 168 patients in total, 733 of the female sex and 435 of the male sex, ages of 18 to 76 years; the time of evolution with HD was from one week to 25 years. Only the HSS surgical procedure was carried out in all cases, with one day of hospital stay, with no morbidity and mortality; follow-up after a year to the surgical event. Associated comorbidity was found in 43% with varied and joint pathology in 511 patients; the most frequent was in 316 patients with diabetes mellitus, arterial hypertension in 184 and chronic obstructive disease in 31 cases, among others (See table 1). In 93 patients they had received previous surgical treatment of hemorrhoidectomy, which represents 7.88%, and 145 patients who are 12%, with a surgical antecedent of ano-rectal surgery that does not involve HE. In addition, the symptoms and signs of the clinical picture presented by the patients according to each clinical history analyzed are identified, the main and most frequent being the sensation of a foreign body in the first place or hemorrhoidal prolapses reducible or not, as well as second-degree hemorrhage and the third most frequent anal pain, expressed in table 2.

Diseases	No. of patients	Percentage
Diabetes Mellitus	316	27%
Hypertension	184	15%
Hypothyroidism	5	0.42%
Hyperthyroidism	6	0.50%
Cardiopathy	8	0.67%
Dyslipidemia	25	2.10%
Hyperuricemia	13	1.09%
Chronic renal failure	3	0.25%
Chronic obstructive pulmonary disease	31	2.60%
Psychiatric pathology	11	0.92%

Table 1: Associated morbidity in all patients by number and percentage.

Signs and symptoms	Number of patients	Percentage
Hemorrhage	987	83%
Body Feeling Bizarre (prolapse)	1054	89%
Pain in the anus	769	65%
Itching	593	50%
Fecal staining	356	30%
Chronic Anemia	168	14%
Constipation	524	44%
Chronic diarrhea	72	6%
Luxury	684	58%
Tenesmo	377	20%

Table 2: Clinical picture of the hemorrhoid disease of all patients expressed in number and percentage.

All patients underwent complete perianal physical examination, palpation observation and anoscopy, checking for HD; All patients underwent pre-operative pre-anesthetic assessment with surgical risk ASA I, II in 92% and ASA III in the rest of the patients and/or internal medicine if required. The HSS surgical procedure was carried out in all cases in an elective way, never in an emergency way. The surgical time was on average 30 minutes of all quadrants or less, which varied to one or two quadrants and/or according to those affected; with bleeding in the surgical act less than 10 milliliters on average. With hospital stay less than 24 hours postoperatively with home delivery, there was no morbidity or mortality. Regarding complications, they are detailed in table 3.

Complications	Number of patients	Percentage %
Bleeding	0	0
Abscess	0	0
Acute urine Retention	156	13.3
Fistula anal	0	0
Fissure	3	0.25
Skin flap	57	4.89
Fecal impaction	0	0
Incontinence	0	0
Rectal stenosis	0	0
External hemorrhoid thrombosis	0	0
Relapse Symptoms	0	0
EH Recurrence	0	0

Table 3: Complications of the surgical treatment of HSS.

Bleeding is an obvious present potential sign in this type of surgery, however it did not happen. As the abscess is expected, but prophylactic anti-biotherapy, rectal preparation and sediluvios (seat baths with 4 hours of cold water for 20 minutes) avoided this complication. Acute urinary retention occurred in 13.3%, being the most frequent complication and it was observed by the type of anxiolytic anesthetic used by the Anesthesia service of the benzodiazepine type (midazolam), with an association of 100% in all cases and resolved with single bladder drainage. Three patients underwent postoperative anal fissure at 4 months later, which resolved with conservative treatment. No patient had an anal fistula, as there was no incontinence due to the legacy of not affecting the anal sphincters, which is the anatomical and/or surgical limit. At the beginning of this procedure, the skin flaps were not electroflugured and 57 patients with this complication were present. They began to involve resection and/or electrofulguration of them, avoiding this item successfully. Despite resecting all the quadrants (all external hemorrhoids, internal of all degrees of hemorrhoids and skin flaps), anal stenosis was not present, leaving the wounds open and keeping the mucosal bridges intact. There was no recurrence and the patients remained after one year of follow-up, completely asymptomatic.

Discussion

HD is an anorectal pathology of the most frequent [2], predominantly in the male sex, and although the etiological predominance is dietary and/or even occupational, it has been observed that there is a cultural, emotional, psychological (syndrome of psychosis due to constipation) and it is a fact that the bad defecatory habit (pujo and tenesmus) is an etiological factor. It is a disease acquired by the patient himself and his habits when evacuating; that is why the approach to conservative treatment and its success [1]. HD is classified into four grades, and it has been stigmatized that only the surgical ones are the last two III and IV; but from grade I there are already symptoms such as rectal bleeding and therefore its treatment must be inclusive, which will prevent recurrence.

The EH is classified as:

1. Internal hemorrhoidal disease:
 - a. Grade I: They excel in the light of the anal canal.
 - b. Grade II: They project out of an evacuation with spontaneous reduction.
 - c. Grade III: Those that spontaneously protrude in the defecatory act and require a manual reduction.
 - d. Grade IV: Those that prolapse permanently and are irreducible.
2. External hemorrhoidal disease
3. Internal, external or mixed hemorrhoidal thrombosis.
4. External skin flaps.
5. Mixed hemorrhoidal disease.

The diagnosis of HD is clinical with a complete clinical history and physical examination. With regard to the presentation of the clinical picture, it will never be an emergency (pain is not an emergency), nor is hemorrhoidal thrombosis [1]. Regarding the treatment they are multiple, varied and we can divide them into conservative and invasive ones; as the ligature with elastic band with Barron technique, simple, fast and effective but very limited only to HD grade I and II; but it can culminate in a hemorrhoidal thrombosis and/or in a formal surgery [3]. Sclerotherapy is simple and effective but only in HD grade I and II, with the same complications as in the elastic band and with more risks such as abscesses, anal fistulas and fissures, they have dropped out as well as cryotherapy or cryo destruction [4]. Photocoagulation with infrared rays or called laser hemorrhoidectomy, which uses a 980-nm laser diode (nanometer), should be used as the first choice in grade I and grade II hemorrhoids; in addition, that the size of the internal hemorrhoids does not allow the placement of an elastic band; its disadvantages are the cost of equipment and little or no results in grade III hemorrhoids [4-6]. The appearance of PPH (hemorrhoidal prolapse procedure) as a surgical method able to efficiently control the symptoms of prolapsed hemorrhoids III and IV, was perhaps only a fad since it is limited in the type of HD, costly and little by little has fallen into disuse [7].

Surgical treatment is the only truly curative method of HD; it is indicated in all patients in whom non-surgical medical or alternative treatment has failed. That is why the hemorrhoidectomy with the closed technique of Ferguson, or the open hemorrhoidectomy of Milligan and Morgan, the submucocutaneous of Parks, are the gold standard to date [6,8]. Hemorrhoidectomy by ligation or dearterialization with Doppler, has offered some recurrence, as well as reoperation, increase in costs and surgical time, are still under study and approval that like the PPH would be a more fashion to be analyzed and evaluated its use or not [4,9]. In addition, the use of harmonic scalpel is important to mention, since it does not make a statistical difference between the other surgical methods, in this case the dearterialization with Doppler, practically with the same observations already mentioned in costs, recurrence, reoperation etc [3,8,10]. In the literature it is indicated that surgical morbidity is higher and/or higher than 26.5% in the Doppler dearterialization group compared with conventional hemorrhoidectomy of only 8.82% [11]. Dearterialisation with Doppler express a higher recurrence rate and a longer operative time [12]. It has been mentioned all surgical treatments so far in their modalities and/or variants that have tried to transcend in recent years with disproportionate increase in costs and complexity of procedures, with truly questionable results. However, we rarely turn to cash, simplicity and low cost; and that the search for the premise of cure completely without complications or sequelae to patients, is the main objective of all this, in order to improve and evolve.

Conclusions

The treatments of HD have tried to impress in recent times with increased costs, which sometimes disproportionate and with poor results. This surgical technique of HSS, not yet described in the literature, offers results based on evidence, with the following premises: minimal postoperative pain, no recurrence, no stenosis, no incontinence and no bleeding; an unprecedented cure is achieved at 100% of the patient, without complications and/or sequelae.

The HSS, is an effective surgical technique, with a high degree of safety and as a definitive solution for this proctological pathology. And it must be considered for its diffusion and application as an excellent therapeutic alternative. It should be mentioned that the best surgical technique is the one that the surgeon dominates and does frequently.

Conflict of Interests

We declare that there are no interests in conflict and that we do not receive any kind of financing.

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