

Rubber band ligation in the management of symptomatic hemorrhoidal pathology after failure of traditional treatment at the Sikasso hospital in Mali

Abstract

Introduction: The management of hemorrhoidal disease poses enormous problems in Mali due to the lack of legislative and regulatory measures from health authorities for traditional healers to incorporate the notion of referrals in their management of patients. In recent years, the treatment of hemorrhoidal disease has seen major breakthrough. The aim of this study was to evaluate the efficacy of rubber band ligation in the management of symptomatic hemorrhoidal pathology after failure of traditional treatment.

Patients and methods: It was a prospective, descriptive study of symptomatic patients who received outpatient treatment. These patients were collected over a period of 7 months (February 2017 - August 2017) at Sikasso Hospital with regular follow-up. Statistical analysis of data was done with the Epi-Info version 7 software. Each patient received a Normacol enema one hour before the rubber bands were placed.

Results: A total of 38 patients were included in our study. The mean age was 43.7 ± 12.2 years with a (male/female) sex ratio of 4.42. The symptoms were dominated by rectorrhagia (76.31%) associated with moderate anemia (21.05%), severe anemia (5.26%); chronic constipation (68.42%) and proctalgia (44.73%). The indications for the instrumental treatment by Rubber band ligation of hemorrhoids was; the symptomatic internal hemorrhoids of grade III in 71.05% and of grade II in 28.94%. An average of 1.95 (1–2) sessions were performed with an average of 2.79 elastic rings (1–3) per session. Clinical satisfaction was reported in 97% of cases after 6 months post-rubber band ligation follow-up. One case of hemorrhagic recurrence was noted in post rubber band ligation after a follow-up of 6 months.

Conclusion: The results of our study are reassuring and encouraging with respect to the efficient management of grade II and III symptomatic hemorrhoidal disease by instrumental treatment in our region where patients turn to modern medicine only in case of complications.

Keywords: Hemorrhoidal disease, traditional treatment, rubber band ligation, hemorrhoidal pathology, surgical treatments, rubber band ligation, Epi-Info software, anti-inflammatory, homeostasis, constipated, diarrheic, internal hemorrhoids

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Introduction

Hemorrhoids are normal anatomical structures found in all humans since birth.¹ Rubber band ligations are recommended in the case of bleeding (grade A) and moderate hemorrhoidal prolapse, or limited to a single pack in case of internal hemorrhoids grades 2 and 3 (grade B).² Hemorrhoidal disease, well known for centuries has always been treated according to different societies, their realities, according to the symptoms but also its social interpretation. The management of hemorrhoidal disease, commonly known in Bambara as “Koko”, poses huge problems in modern medicine in Mali due to lack of legislative and regulatory measures from the health authorities concerning traditional therapists to integrate the notion referrals in their care of patients in general. Its treatment has seen in recent decades major advances, not only in the field of medical and surgical treatments, but also and especially in the field of instrumental treatments. Most recommendations advocate the use of sclerosing injections or photo coagulation in grade I or II hemorrhoids, reserving more effective

rubber band ligations for grade III and surgery for grade IV.^{3,4} The aim of our work was to evaluate the efficacy of rubber band ligation in the management of symptomatic hemorrhoidal pathology after failure of traditional treatment.

Patients and methods

This was a prospective, descriptive study carried out on symptomatic patients who received outpatient treatment and having traditional treatment failing. These patients were collected over a period of 7 months (February 2017 - August 2017) at Sikasso Hospital with regular follow-up. Non-consenting patients were not included in this study. Each patient received an enema of Normacol one hour before the rubber band ligations were placed. The technique of the rubber band ligation we used was performed through the anal opening, using a proctoscope equipped with a lighting system, a sterile instrument at its end and a small cylinder for aspiration, suction of the mucosa a centimeter above the hemorrhoidal bundles

of a superficial area of the wall and to position the rubber band. This placement of the ring causes a shrinking and destruction of the hemorrhoidal mass tissue. Then, the rubber band is spontaneously removed leaving a small wound that heals in two to three weeks. The procedure itself takes only a few minutes. One or more bands can be applied during the same session. After the rubber band ligation of hemorrhoids, each patient was given a prescription allowing him to have the normal transit according to the context (whether constipated or diarrheic) associated with dietary measures, an analgesic, and anti-inflammatory medications if necessary. Data analysis was done with the Epi-Info version 7 software at the Laboratory of Epidemiology and Public Health of the Faculty of Medicine and Pharmacy of Fez.

Results

A total of 38 patients were recorded including 31 men for 7 women, a sex ratio of 4.42. The mean age was 43.7 ± 12.2 years (range, 26–81 years). The symptoms were largely dominated by rectorrhagia (76.31%) resulting in a moderate anemia diagnosed in 21.05% (8 patients), severe anemia in 5.26% (2 patients) requiring a blood transfusion before ligation. There was also chronic constipation (68.42%) and proctalgia (44.73%). An antecedent of rubber band

ligation failure was noted in one case; a notion of family history of undocumented hemorrhoidal disease was reported in 42.10% of cases (16 patients). The indication of the instrumental treatment by rubber band ligation of hemorrhoids was; in symptomatic internal hemorrhoids of grade III in 71.05% of cases (27 patients); grade II in 28.94% (11 patients). Biological assessment of homeostasis (TP, TCK, TS), full blood count with platelets, Rh grouping, irregular agglutinin (RAI) was performed in 89.47% of patients (34 cases). To obtain a clinical remission and achieve the therapeutic goal identified, we performed on average 1.95 session (1–2) of ligation. The average number of rubber bands per session was 2.79 bands (1–3). A notion of mild to moderate rectal pain was reported by 10 patients (26.31%) within 6 to 12 hours after ligation which was subsided by oral analgesic and anti-inflammatory drug. Rectorrhagia was noted in two patients (5.26%) between the tenth and fourteenth day post-ligation. Liquid diarrhea with minimal rectorrhagia was noted in 1 case on the tenth day post-ligation which was treated symptomatically. No macroscopically suspicious lesions in examinations requiring sampling were observed (especially in patients over 40 years of age). Total clinical satisfaction was reported in 97% of cases 6 months post-ligation follow-up. No recurrence was noted in post-rubber band ligation after 6 months of follow ups (Figure 1) (Figure 2).



Figure 1 Rubber band ligation of grade II hemorrhoid.



Figure 2 Rubber band ligation of prolapsed grade III hemorrhoid.

Discussion

This study included patients with hemorrhoidal symptoms after treatment failure in traditional healers. Internal hemorrhoids are elements normally present inside the anus. They consist of blood lakes wrapped in a coating and attached to the deep muscular wall by a natural mooring system. They thus form pads that could act as “seals” of the anus.⁵ Traditional healers having little or no knowledge of anus and rectum anatomy prescribe the treatment by trial and error. This very often delays the proper management of these patients and can also cause injuries that often compromise the functionality of its

structures in the medium and long term. The three main therapeutic methods used by traditional healers in Sikasso are:

- Shea butter mixed with several plant extracts used in anal application for weeks.
- Powder of leaves of spicy plants transformed into balls for rectal use every evening at bedtime.
- Local bath using infusion of bark of plants twice a day for several weeks.

Moreover, despite our insistence with the various traditional therapists to know the plants used in the arsenal of treatment, they did not want to give us and the reasons are simple: “it is a professional, family and traditional secret which must be transmitted only to our descendants”. This list is far from exhaustive because other methods are described and much more traumatic. The statistics on global advances are extrapolations from the recent WHO global survey on national policy and regulation for traditional medicine and complementary/alternative medicine (WHO Global Survey on MT/MC) and are based on critical indicators outlined in the WHO Strategy for Traditional Medicine for 2002-2005.⁶ Thus, it would be difficult to rationally appreciate the effectiveness of hemorrhoidal pathology traditional treatment because there is a lack of scientific basis and convincing evidence concerning the elements involved in the composition of concoctions used but also their mode of action on hemorrhoids. So it is difficult to find logic in this practice based essentially on “illusion, trial and error”. Modern treatments of hemorrhoids have provided a safe and effective response to the concerns of patients. The rubber band ligation of hemorrhoids is an effective alternative to surgery for the same indications; it is less expensive and has the advantage of being performed in outpatient consultation. In our series a disappearance of the symptoms was noted in 97% of cases as in literature which reported in short term a disappearance or an improvement of symptoms in 70% to 90% of cases.^{7,8}

As stated in the literature by many authors, our series confirms that rubber band ligation is an effective treatment for hemorrhoidal disease stage II.⁹ Thus we can say that despite a failure of prior treatment in traditional healers, the rate of success by rubber band ligation remains high in these patients. Side effects are common to all instrumental techniques. Pains are frequent after the therapeutic intervention, also discomfort and sensations of intra-anal foreign body which may persist for several days and handicap the patient. These same trends have been reported by some authors with a frequency of 5 to 85% after rubber band ligation.¹⁰ In our cohort, mild to moderate rectal pain was reported in 26.31% of cases within 6 to 12 hours after ligation. Rectorrhagia was noted in two patients between the tenth and fourteenth days post-ligation. This corroborates with literature since it reports that rectorrhagia linked to necrosis of superficial mucosal are possible until the tenth day and they are observed in 1 to 5% of cases.¹⁰

Conclusion

The rubber band ligation of symptomatic internal hemorrhoids of grade II and III constitute a reliable and effective method in

medium term. It saves a large number of patients from surgery devoid of consequences on the internal sphincter. The results of our study are fairly reassuring and encouraging with reference to efficient management of symptomatic hemorrhoidal disease of grade II and III in our regions where patients don't consult modern medicine until the advanced stage of their disease.

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None.

Conflict of interest

The authors declare that they do not have any conflict of interest.

References

1. Traitement des hémorroïdes par ligature élastique: SNFCP; Dr. Charlotte FAVREAU. Rédigé: mars 2014.
2. Higuero T, Abramowitz L, Staumont G, et al. Clinical practice guidelines for the treatment of hemorrhoid disease. *Société Nationale Française de Colo-Proctologie (SNFCP)*. In Press.
3. MacRae HM, McLeod RS. Comparison of hemorrhoidal treatment modalities. A meta-analysis. *Dis Colon Rectum*. 1995;38(7):687–694.
4. Abramowitz L, Godeberge P, Staumont G, et al. Recommandations pour la pratique clinique sur le traitement de la maladie hémorroïdaire. *Gastroenterol Clin Biol*. 2001;25:674–702.
5. Ligature élastique des hémorroïdes internes; Pr Siproudhis, mise en ligne en Novembre 2003.
6. Stratégie de l'OMS pour la médecine traditionnelle pour 2002-2005. Genève, Organisation mondiale de la Santé, 2002.
7. Johanson JF, Rimm A. Optimal nonsurgical treatment of hemorrhoids: a comparative analysis of infrared coagulation, rubber band ligation, and injection sclerotherapy. *Am J Gastroenterol*. 1992;87(11):1600–1606.
8. MacRae HM, McLeod RS. Comparison of hemorrhoidal treatment modalities. A meta-analysis. *Dis Colon Rectum*. 1995;38(7):687–694.
9. Savioz D, Roche B, Glauser T, et al. Rubber Band Ligation of hemorrhoids. relapse as a function of time. *Int J Colorectal Dis* 1998;13(14):154–156.
10. Faucheron JL, Gangner Y. Doppler-guided hemorrhoidal artery ligation for the treatment of symptomatic hemorrhoids: early and three-year follow-up results in 100 consecutive patients. *Dis Colon Rectum*. 2008;51(6):945–949.