Late Bleeding After Hemorrhoid Treatment with Rubber Macroband Ligation

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ABSTRACT
Objetive: *To present an infrequent clinical report of a case of late bleeding after rubber macroband ligation.*
Case report: *A 28-year-old female with severe rectal bleeding but no associated shock was presented 28 days after rubber macroband ligation at emergency room. Blood samples showed acute anemia. An urgent colonoscopy was performed which showed a scar without acute bleeding. Medical treatment was settled. There was no secondary bleeding in follow up. Endoscopic control was done at 60 and 180 days.*
Discusion: *Hemorrhoidal rubber macroband ligation is a modification of conventional rubber band ligation. It was proposed and developed by J.A. Reis Neto (Campinas, SP, Brazil). Morbidity is low and results are excellent. There is no previous report of delayed bleeding considering both rubber band and macroband ligation.*
Conclusion: *The First case of late bleeding after rubber band ligation treated with conservative measures.*

Key words: *Hemorrhoids; Rubber Band Ligation; Reis Neto; Non-Surgical Treatment*

INTRODUCTION

Rubber macroband ligation, a procedure developed by José A. Reis Neto (Campinas, SP, Brazil),[1,2] is a variant of the technique described by Blaisdell[3] in 1954, and later popularized by Barron[4] in 1963. They are proposed for the treatment of grade II and III hemorrhoids.

The concept is basically similar to that of conventional banding, but takes more tissue, 1 to 3 cm3 per shot, and must be placed at a higher level of the anal canal. The devices were all developed by Professor Reis Neto (Campinas, Sao Paulo, Brazil)[1,2] (figs. 1 and 2). The few complications after the procedure are pain, bleeding, thrombosis and urinary retention. Unlike the conventional banding, no complications severe or specifically due to the method have been described. Among them, bleeding is the most frequent, although most cases occur early in the first week.

CASE REPORT

We present the case of a 26-year-old woman with a history of hemorrhoid treatment by means of rubber macroband ligation. Twenty-eight days after the procedure, he was admitted at the emergency department for profuse rectal bleeding without signs of hypovolemic shock. Lab tests showed hematocrit 27% and hemoglobin 8.9 mg / dl, and the rest were normal. The systemic and cardiovascular evaluation was normal. The patient was scheduled for a colonoscopy, showing the macro-ligation scar with an attached and partially detached clot, without active bleeding (fig. 3).

Expectant management with treatment of general condition and anemia was decided. The patient evolved without rebleeding with endoscopic control at 60 and 180 days (figures 4 and 5). She has excellent anatomical and functional results.

DISCUSSION

Complications associated with elastic ligatures can be mild, moderate, and severe. Among the latter, some are life-threatening. Mild and moderate complications include pain, bleeding, thrombosis, vasovagal reaction, urinary retention, anal fissure, and chronic ulcers, and have an incidence of 1 to 9%. Acute and severe complications are infrequent. They exist in 1 to 3% and among them, Fournier's gangrene, pelvic sepsis, liver abscess, tetanus, endocarditis, and up to 7 published deaths were reported.[5-8]

In contrast, macroband ligation has only been associated with mild complications with an incidence of 5 to 14%. These include bleeding, tenesmus, and thrombosis. Also, intraoperative complications such as submucosal and perineal hematoma without clinical repercussions were published. Although the discomfort rate can be as high as 24%, only 2 to 8% of patients have severe complications.[1,2]

The severe postoperative pain after hemorrhoidectomy is different from that reported after non-excision techniques such as macroband ligation. The latter are mainly associated with mild to moderate discomfort that relieves with analgesics, although the main symptom is tenesmus.

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Receibed: *June 2019.* ***Accepted:*** *September 2019.*

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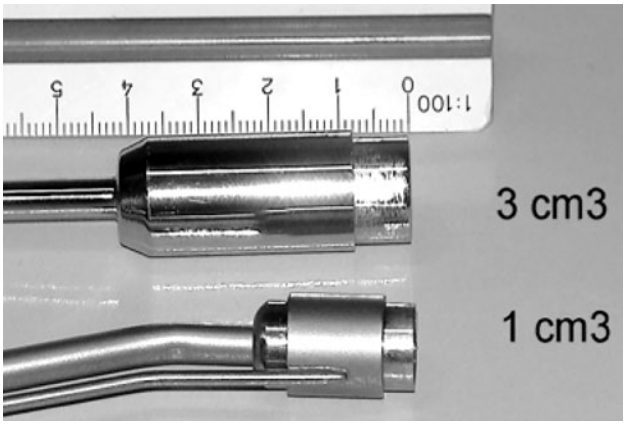

Figure 1: Device for macroband ligation designed by Reis Neto. Note the greater diameter compared to that of the conventional device.

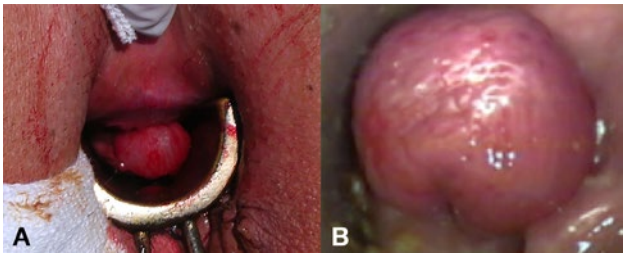

Figure 2: Differences between conventional rubber band (A) and macroband (B) ligation of hemorrhoids.

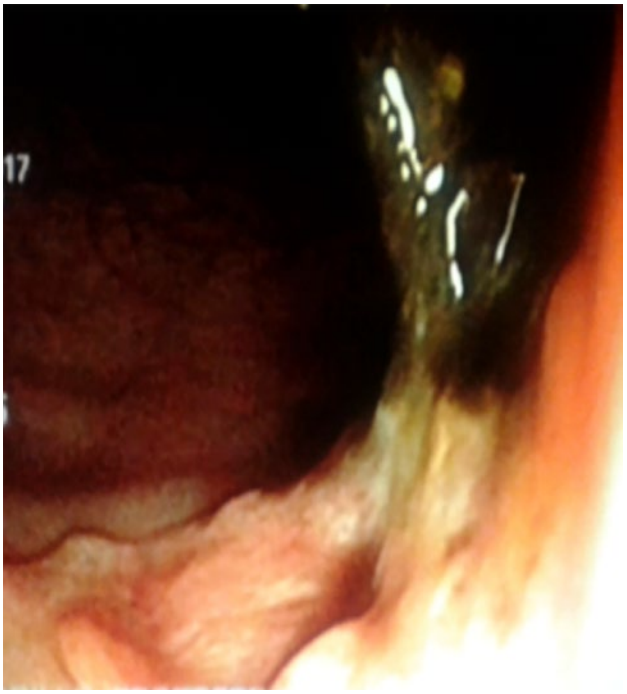

Figura 3: Emergency colonoscopy. Adhered and partially detached clot.

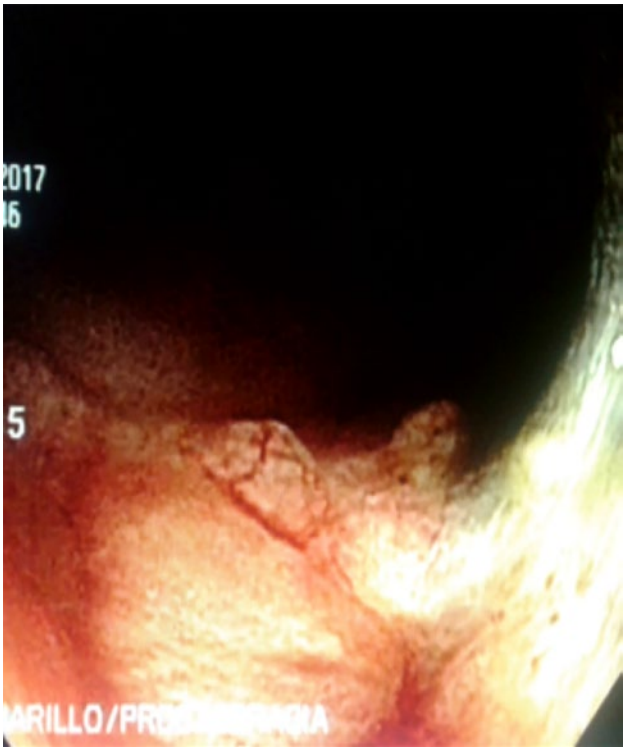

Figure 4: Endoscopic control at 60 days.

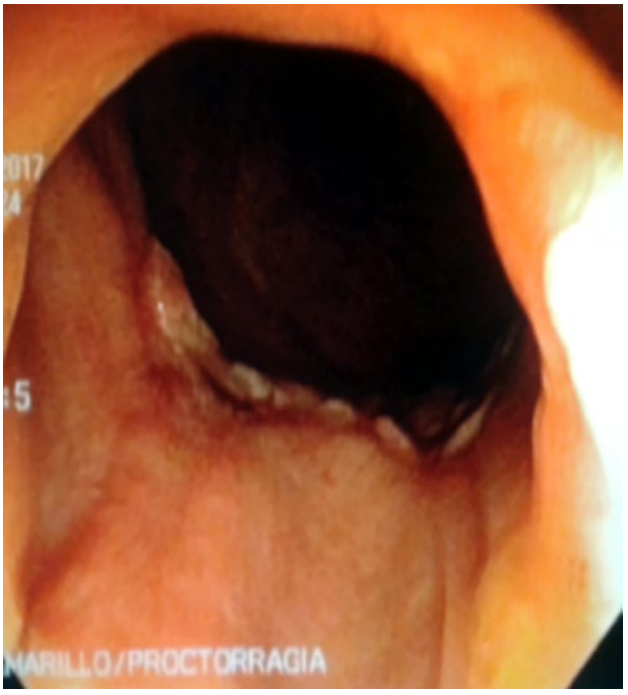

Figure 5: Endoscopic control at 6 months.

Bleeding after the procedure can vary from mild to moderate, and only few severe cases were described although with no need for surgical treatment.[5,6]

The risk of bleeding is 1 to 2% in standard banding.[7] Although severe bleeding was reported, usually occurred in the first 7 to 10 days, time considered normal after this procedure. After macroband ligation, the few cases of severe bleeding without the need for surgery also occurred before 10 days.[7,8]

We present the first case in the literature of severe delayed bleeding, which occurred almost one month after macroband ligation of hemorrhoids and could be treated conservatively.

CONCLUSIONS

Hemorrhoid rubber macroband ligation is a feasible variant of conventional banding, as an alternative treatment to surgery.

It has low morbidity, and none severe or specific complications due to the procedure have been reported to date. Bleeding reported as severe occurs before 10 days.

The first published case of late bleeding in both conventional and macroband ligation is presented, which could be managed conservatively without the need for surgery.

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COMMENT

The clinical case reported by Dr. Amarillo et al. is interesting for different reasons. First, the complication described, despite being hypothetically very improbable, has not been previously published. Macroband ligation, unlike conventional rubber band ligation, is not used by many specialists in our environment, and less worldwide. It could be assumed that the fact of making a greater hemorrhoid volume ligation and generating a larger eschar may explain the presence of late bleeding. On the other hand, the way in which the diagnosis was made using an endoscope and the fact of not making a therapeutic gesture when faced with bleeding that causes anemia can be discussed. In favor of this management, is the infrequence of late bleeding from banding, and to have ruled out other causes of colorectal bleeding, proceeding conservatively only after certifying that it subsided spontaneously.

In summary, the case presented is valuable due to its correct registration and the fact that it is unpublished in the literature.

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