



## Case Report

# Anorectal hemangioma – differential diagnosis of anal bleeding



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### ABSTRACT

Anorectal hemangioma is one of the rarest causes of lower gastrointestinal bleeding, but is often neglected and confused in the differential diagnosis. The clinical examination is a turning point for a correct diagnosis and management of patients, thus avoiding unnecessary procedures. The treatment of choice for this condition is surgical and intraoperative bleeding is the main complication of this therapy. The present case reports a 25-year old patient with a history of bleeding from the age of 13, being diagnosed with anorectal hemangioma, and surgically treated with resection of the affected segment and with wound synthesis by marsupialization, with a good progression postoperatively.

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### Hemangioma anorretal - diagnóstico diferencial de sangramento anal

#### RESUMO

O Hemangioma Anorretal é uma das mais raras causas de Hemorragia digestiva baixa, sendo muitas vezes negligenciada e confundida no diagnóstico diferencial. O exame clínico representa um ponto decisivo para correto diagnóstico e manejo do paciente, evitando realização de exames desnecessários, e o tratamento de escolha dessa patologia é cirúrgico, sendo o sangramento intraoperatorio a principal complicação dessa terapêutica. O relato de caso a seguir reporta a história de paciente com 25 anos, que apresentava sangramento desde os 13, sendo diagnosticado com Hemangioma Anorretal e tratado cirurgicamente com ressecção do segmento afetado e síntese de ferida com marsupialização, evoluindo bem no pós-operatório.

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## Introduction

A bleeding episode with its origin distal to the Treitz angle is called a lower gastrointestinal bleeding; in these conditions, the prevalence achieves 15% among all gastrointestinal tract bleedings. Among the causes of lower gastrointestinal bleeding, about 95% emerge from the large intestine. In patients under 50 years, these bleedings are mainly caused by injuries of anorectal region, while in those over 70 years, diverticular disease and angiodysplasia are the main causes.<sup>1,2</sup>

Among all of the above causes, anorectal hemangioma is one of the rarest, and often this injury is neglected in the differential diagnosis and confused with most prevalent diseases such as hemorrhoids, Crohn's disease, or ulcerative colitis, causing delays in the treatment and maybe causing severe bleeding episodes leading to mortality rates above 40%.<sup>3,4</sup>

Defined as a benign congenital vascular neoplasm, anorectal hemangioma was first described in 1839.<sup>5</sup> Painless rectal bleeding is the main clinical manifestation, and is often associated with anemia.<sup>3,6-8</sup>

Diagnostic suspicion arises from clinical examination with direct visualization of the injury; this examination can be complemented with laboratory tests, mesenteric and internal iliac arteriography, and colonoscopy, depending on the site. Biopsies should be avoided, due to the high risk of bleeding.<sup>3,9,10</sup>

The treatment of choice is surgical, with resection of the affected segment, with preservation, wherever possible, of the anal sphincters. A major complication is the occurrence of intraoperative bleeding, especially during more extensive resections.<sup>3,4,8</sup>

The following case report describes the story of a patient with anorectal hemangioma who had bleeding complaints since the age of 13, being diagnosed and treated surgically by the age of 25.

## Case report

Patient, 25 years, male, was admitted to a coloproctology service with the main complaint of 'bleeding through the anus since the age of 13' (sic). In the anamnesis, the patient reported that such bleeding occurred with and without regard to evacuation, increasing in intensity and becoming more frequent, sometimes inciting hemodynamic instability with hypotension, severe pallor, and syncope. This situation led the patient to seek an emergency service, in order to be hospitalized for blood transfusion. This patient reported asthma in childhood and reported that his father had hemorrhoids. On physical examination, a mucocutaneous pallor (++)/(+++), and a purplish stain in his perianal region, as well as a skin of spongy consistency on digital rectal examination, between 4 and 7 h, were found. The tests brought by the patient for the first consultation indicated anemia (hemoglobin = 7, hematocrit = 21). The patient also brought results of the following studies: high-digestive endoscopy, colonoscopy, intestinal transit, endoscopic capsule, and computed tomography of the abdomen; all these tests were within normality parameters.

A pelvic angioresonance was requested and performed, and was suggestive of anorectal hemangioma. The patient



**Fig. 1 – Exposure of an anorectal hemangioma.**

was admitted 15 days after the consultation, underwent blood transfusions to correct his anemia and was submitted to a surgery. During the procedure, the hemangioma was resected (Fig. 1); the injury was situated in the perianal region and into the canal. Thus, we decided in favor of a marsupialization of the wound, in order to reduce its size, with a consequent reduction in healing time.

The patient had a good progression through the immediate postoperative period and was discharged within 48 h. Histopathological examination of the surgical specimen supported a firm diagnosis of hemangioma. A follow-up scheme in the doctor's office was established, at every two weeks for the case review. The wound was completely healed in about 4 months.

## Discussion

In the first place, in order to obtain an effective diagnosis in the context of a hemangioma, it is critical to differentiate the terms vascular ectasia, angiodysplasia, and hemangioma, which are often confused in the literature. Thus, vascular ectasia is an injury where there occurs dilation of pre-existing vessels; angiodysplasia is a malformation of vessels due to a defect in their formation, and hemangioma would be a neoplastic injury.<sup>11,12</sup>

Hemangiomas of the digestive system often are associated with skin lesions of the same nature. In this context, despite the absence of a known etiology, in some cases, a family tendency is found, suggesting an autosomal dominant inheritance.<sup>3,4,11</sup>

At histological level, the hemangiomas can be divided into (1) Cavernous Hemangiomas, like that in the above case, representing up to 80% of cases; these injuries consist of thin-walled, large vascular channels with a small amount of connective stroma; more often, they may be diffuse and

extensive, with an infiltrative or polypoid character. When involving a larger segment of the digestive apparatus, cavernous hemangiomas characterize the so-called multiple phlebectasia. Bleeding is their most frequent manifestation, and this problem may begin in childhood with recurrent, of increasing severity, episodes; in addition, anemia is a constant finding. (2) Capillary Hemangiomas, usually single and asymptomatic formations, representing 10% of colorectal hemangiomas; and (3) Mixed Hemangiomas, frequently found in the stomach, small intestine, and appendix.<sup>12</sup>

The diagnosis of hemangioma may be confused with many other diseases, as already mentioned. A mesenteric and internal iliac angioresonance, although not conclusive in some cases, is a procedure of the utmost importance in the diagnosis of hemangioma. Even with the possibility of obtaining a diagnosis, one must avoid using biopsies, due to the high risk of bleeding.<sup>3,4,7,12</sup>

The treatment of choice is surgical, through a resection of the affected area, but there are some endoscopic and radiological methods already published that can be effective, such as ethanol embolization through arteriography.<sup>3,11,12</sup>

Thus, in view of the reported case, one must consider the critical importance that the anorectal hemangioma, although an uncommon neoplasm, should always take part in the differential diagnosis of anorectal diseases, especially in a patient suffering from lower gastrointestinal bleeding. Furthermore, it is worth emphasizing the importance of conducting a thorough clinical examination that, *per se*, may suggest the diagnosis, guiding the physician in the correct propaedeutic strategy for these patients. This procedure will avoid costly tests, which will postpone the diagnosis and may even endanger the patient's life.

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### Conflicts of interest

The authors declare no conflicts of interest.

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