

## LETTER TO THE EDITOR

# Melanoma of the anal canal

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## INTRODUCTION

Anorectal melanoma is an uncommon and aggressive cancer with an unfavorable prognosis<sup>2-5,7,9-11</sup> and a predilection for early infiltration and distant spread, resulting in poor overall survival.<sup>2</sup> It represents approximately 1 percent of all anorectal malignancies.<sup>7,11</sup> Between 0.4% and 1.6% of all melanomas arise in the anorectal region, and the anal canal is the most frequent site of melanoma after the skin and retina.<sup>11</sup> Most patients are female.<sup>2,3</sup> The first case of the disease was reported by Moore in 1857 and, so far, approximately 500 cases have been reported in the literature.<sup>11</sup>

Because anal melanoma is rare, only small case series have been reported in the literature, making it difficult for one to draw conclusions about optimal treatment and outcome.<sup>2</sup> The surgical management of patients with anorectal melanoma is controversial.<sup>1</sup> Some authors have stated that wide local resection is the first choice for primary anorectal melanoma if negative margins can be achieved when this is technically feasible and complete tumor resection is impossible.<sup>3,5</sup> Abdominoperineal resection should be reserved for large tumors where wide local excision is not technically possible.<sup>5</sup> Chemotherapy, radiotherapy, and immunotherapy should be considered in the treatment of anorectal melanoma in order to influence overall survival.<sup>3</sup>

## CASE REPORT

We report the case of a 76-year-old man who presented with a four-month history of rectal bleeding, pain, tenesmus, and 3kg weight loss. A semicircular rectal tumor was seen just above the dentate line. Biopsies demonstrated that it was an amelanotic malignant melanoma since protein S100, melanoma antigen HMB45, and Melan-A expression were found. MRI revealed circumferential thickening due to rectal lesion with a 7.2 cm length and 1.8 cm thickness, leading to narrowing of the rectal lumen located 3.2 cm away from the anus and several enlarged perirectal nodes (Figure 1). No distant lesions were detected upon computed tomography scan. An abdominoperineal resection was performed because a substantial part of the internal anal sphincter was invaded (Figure 2). Histology (Figures 3, 4, 5)

confirmed a malignant metastatic, epithelioid melanoma in 13 of the 14 examined lymph nodes.

The patient recovered well from the operation, was released on the 6th postoperative day, and was referred to an oncologist. Thirty days postoperatively, the individual

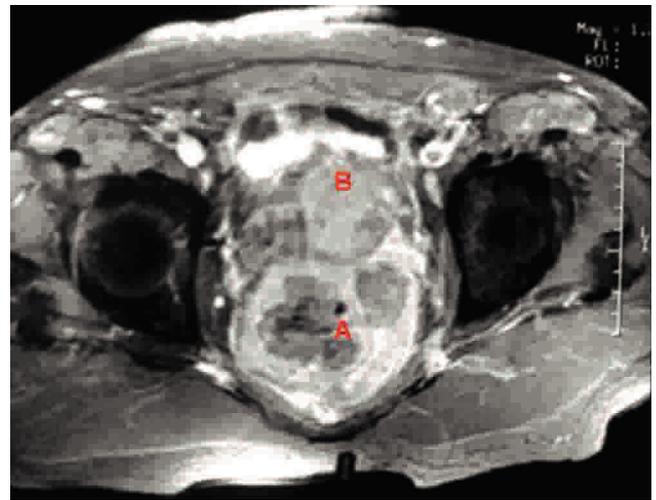


Figure 1 - Magnetic resonance imaging showing rectal neoplasm (A) and perirectal nodes (B).

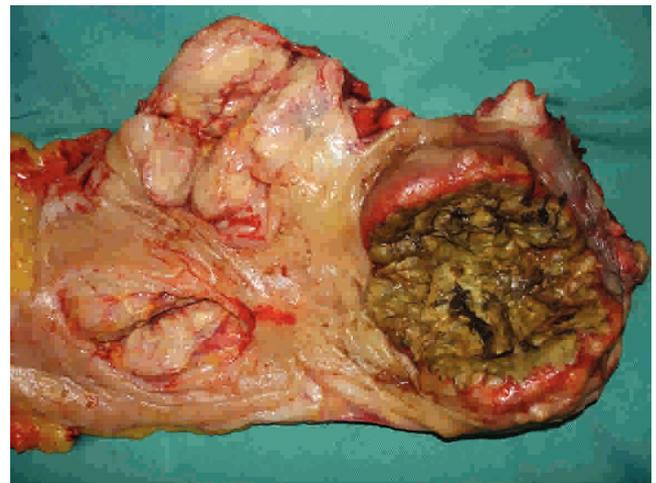
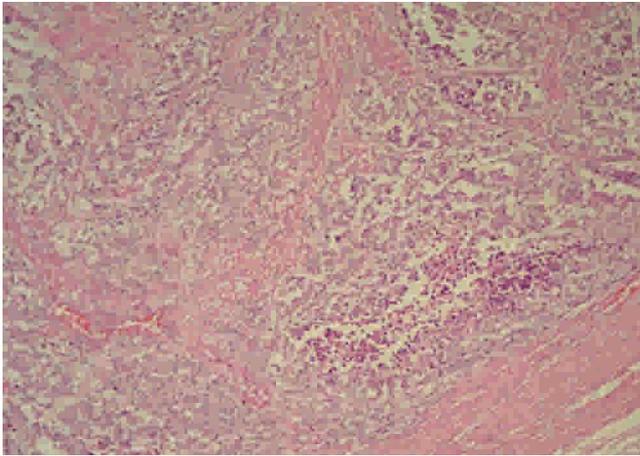
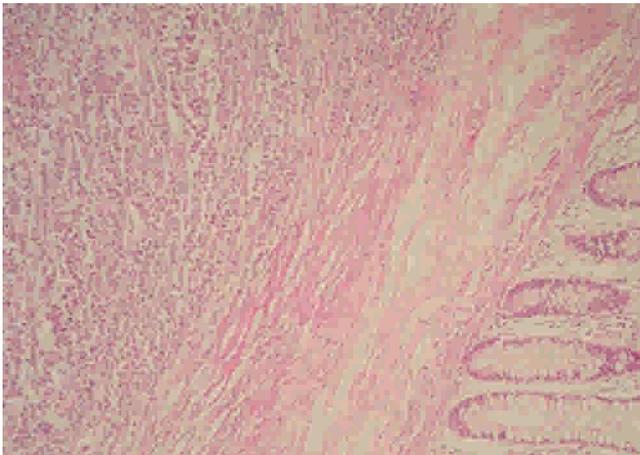


Figure 2 - The rectum, the large nodes, and the tumor after an abdominoperineal resection.

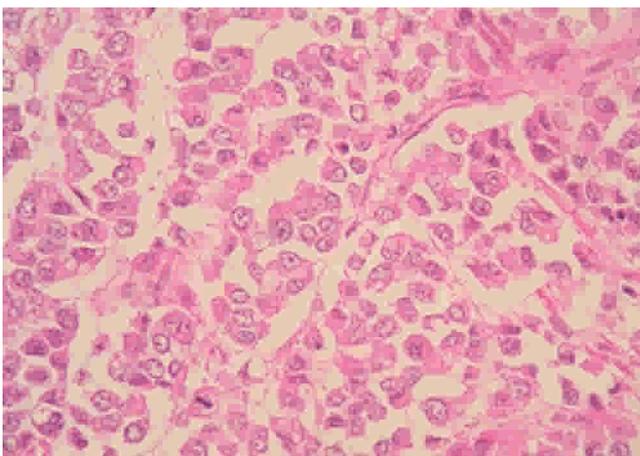
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**Figure 3** - Anal melanoma. Cross-section of the external surface region (H&E  $\times$  100).



**Figure 4** - Anal melanoma. Cross-section of the mucosa surface region (H&E  $\times$  100).



**Figure 5** - Anal melanoma. Cross-section of the tumor region (H&E  $\times$  400).

presented with abdominal pelvic ganglionic and pulmonary and hepatic metastases, progressed to bilateral urethral obstruction due to neoplastic invasion, and died of renal failure.

## DISCUSSION

Anorectal melanoma is an uncommon and aggressive cancer with an unfavorable prognosis.<sup>2-5,7,9,10</sup> It is more common in females,<sup>2,3,6</sup> and the mean age of disease onset is 60 years.<sup>6</sup> It is characterized by unspecific symptoms, and differential diagnosis with other lesions of the rectum and anus is often difficult.<sup>7</sup> The most common complaints are bleeding, rectal pain, tenesmus, and changes in bowel habits. At the histological examination, the presence of protein S-100, melanoma antigen HMB-45, and Melan-A expression are strongly suggestive of melanoma.<sup>4</sup>

The overall survival time is 10-19 months after diagnosis.<sup>1,3</sup> The prognosis of primary malignant anorectal melanoma is poor, irrespective of surgical treatment.<sup>3</sup> Survival is improving, but the use and extent of operation are not associated with improved overall survival rates.<sup>2</sup> Neither age at diagnosis, performed operation, nor use of radiation significantly affect survival.<sup>2</sup>

The surgical management of patients with anorectal melanoma is controversial.<sup>1,5-10</sup> Despite surgical resection and the emergence of various forms of adjuvant therapy, the overall prognosis of anorectal melanoma remains the same. Radical surgery is, when possible, the most effective therapeutic option for the treatment of primary and metastatic melanomas since chemotherapy and radiotherapy do not lead to the same results in terms of cure in these patients.<sup>11</sup> Abdominoperineal excision of the rectum (APER) is the first choice for patients with anorectal melanoma, particularly those with smaller tumors and no evidence of nodal metastases.<sup>1,6</sup>

Other authors have claimed that wide local excision (WLE) is the preferred treatment where negative margins can be achieved and that APER should be reserved for cases in which complete tumor resection is impossible, for instance when the tumor invades a substantial portion of the anal sphincter or is circumferential.<sup>3-5,7-10</sup>

A recent article has shown that the survival rate of patients with anal melanoma is similar after local excision or rectal resection, irrespective of whether patients have the localized or regional stage of the disease.<sup>12</sup>

Adjuvant radiation therapy is well-tolerated and promising in improving loco-regional control.<sup>10</sup> The final outcome is not influenced by surgery modality. A limited but radical excision can be considered whenever possible, while a major demolitive surgery should be applied for therapy of advanced or bulky lesions only.<sup>11</sup>

Despite the radical surgery performed in the present case, local relapse and distant metastases occurred within only a month. It was not possible to carry out chemotherapy or adjuvant radiotherapy because of the subject's poor clinical conditions and renal failure due to bilateral urethral obstruction, one of the direct causes of his death.

In this case, abdominoperineal amputation was necessary due to tumor size and extension. Chemotherapy, radiotherapy, and immunotherapy should be considered in the treatment of anorectal melanoma in order to influence overall survival. However, the results are limited.<sup>3</sup>

## REFERENCES

1. Brady MS, Kavolius JP, Quan SH. Anorectal melanoma. A 64-year experience at Memorial Sloan-Kettering Cancer Center. *Dis Colon Rectum*. 1995;38:146-51, doi: 10.1007/BF02052442.
2. Podnos YD, Tsai NC, Smith D, Ellenhorn JD. Factors affecting survival in patients with anal melanoma. *Am Surg*. 2006;72:917-20.
3. Stroh C, Manger T. Primary amelanotic anorectal melanoma - a case report. *Zentralbl Chir*. 2007;132:560-3, doi: 10.1055/s-2007-981393.
4. Pirenne Y, Bouckaert W, Vangertruyden G. Rectal melanoma - a rare tumor. *Acta Chir Belg*. 2008;108:756-8.
5. David AW, Perakath B. Management of anorectal melanomas: a 10-year review. *Trop Gastroenterol*. 2007;28:76-8.
6. Zhong J, Zhou JN, Xu FP, Shang JQ. Diagnosis and treatment of anorectal malignant melanoma - a report of 22 cases with literature review. *Ai Zheng*. 2006;25:619-24.
7. Roviello F, Cioppa T, Marrelli D, Nastri G, De Stefano A, Hako L, et al. Primary ano-rectal melanoma: considerations on a clinical case and review of the literature. *Chir Ital*. 2003;55:575-80.
8. Roumen RM. Anorectal melanoma in the Netherlands: a report of 63 patients. *Eur J Surg Oncol*. 1996;22:598-601, doi: 10.1016/S0748-7983(96)92346-X.
9. Droesch JT, Flum DR, Mann GN. Wide local excision or abdominoperineal resection as the initial treatment for anorectal melanoma? *Am J Surg*. 2005;189:446-9, doi: 10.1016/j.amjsurg.2005.01.022.
10. Homsy J, Garrett C. Melanoma of the anal canal: a case series. *Dis Colon Rectum*. 2007;50:1004-10, doi: 10.1007/s10350-007-0242-5.
11. Belli F, Gallino GF, Lo Vullo S, Mariani L, Poiasina E, Leo E. Melanoma of the anorectal region. The experience of the National Cancer Institute of Milano. *EJSO*. 2009;35:757-62.
12. Kiran RP, Rottoli M, Pokala N, Fazio VW. Long-term outcomes after local excision and radical surgery for anal melanoma: data from a population database. *Dis Colon Rectum*. 2010;53:402-8.