Surgical approach to anorectal melanoma: A case report

Abordaje quirúrgico del melanoma anorrectal, a propósito de un caso

Mucosal melanomas are rare tumors and account for 1.3% of all cases of melanoma. Anorectal melanoma (ARM) makes up 1% of the cancers of the anal canal and is the third most common melanoma, after the cutaneous and ocular types. The anal canal is the most common site for primary gastrointestinal melanoma. ARM is more frequent in women, with a female-to-male ratio of 1.5:1 and mainly affects advanced age patients. The disease tends to go undetected until symptoms present, which can include rectal bleeding, anal pain, pruritus, tenesmus, change in bowel habit, or the presence of an anorectal mass. Palpable inguinal lymphadenopathy, other regional adenopathy, or synchronous distant metastasis present less frequently.

Abdominoperineal resection (APR) used to be considered the best treatment option, but more recent evidence suggests that survival is the same with local excision (LE), which results in less perioperative morbidity. The use of radiotherapy, chemotherapy, or adjuvant immunotherapy has been a subject of debate.

A 63-year-old woman had a medical history of diabetes and high blood pressure, for which she was receiving treatment. Six months earlier she began to have scant rectal bleeding after a bowel movement that progressively increased. Pharmacologic treatment afforded little improvement. She arrived at the emergency department due to abundant rectal bleeding. Upon admission, an 8 cm prolapsed tumor, protruding through the anus, with two 1 cm flaps, was identified (Fig. 1A). Laboratory work-up reported leukocytes 13.2 cell/mm³, hemoglobin 9.8 g/dl, hematocrit 29%, glucose 140 mg/dl, BUN 40 mg/dl, urea 85.6 mg/dl, and creatinine 2.0 mg/dl. The diagnosis was probable rectal cancer. Colonoscopy was performed, revealing a 6 cm dark, friable tumor, and a computed tomography (CT) scan showed no metastasis. PET/CT imaging was not carried out because that test is not available at our institution.

Due to the presence of active bleeding and prolapse that would hinder local resection, APR was performed, revealing, 2 cm from the anus, a 7x5 cm soft, dark, friable prolapsed tumor, with active bleeding, protruding from the rectum (Fig. 1B). The histopathologic analysis reported a 4x3.5 cm anorectal melanoma that invaded the muscle wall, without reaching the radial margin; positive lympho-vascular invasion; the resection of 11 lymph nodes (2 with metastasis); and neoplasia-free margins (Fig. 2). Immunohistochemistry revealed positive HMB-45 and positive Melan-A. The patient’s postoperative period was satisfactory, she was discharged, and is currently undergoing chemotherapy.

APR is a lethal disease, with a median survival of 15 to 21 months. The majority of lesions appear to arise at or below the level of the dentate line; at least 25% are amelanotic. Ford et al. found no significant differences in general survival, with respect to the surgical focus, with a 20.2% survival rate for APR, compared with the 17.3% survival rate of LE (p = 0.31). Iddings et al. found a similar median general survival of 18 and 16 months, after transanal excision and APR, respectively. Five-year survival was similar in the two groups: 16.8% for APR versus 19.3% for transanal resection.

Nilsson and Ragnarsson-Olding studied a total of 251 patients diagnosed with anorectal melanoma, describing a 5-year survival rate of 11.2%. There was no significant difference, regarding the median survival in patients treated with APR or LE (11 vs. 14 months), and the 5-year survival rate was 7 vs. 15%, respectively (p = 0.0984). The risk for recurrence was significantly lower when an R0 resection was achieved (p < 0.001), albeit the recurrence risk after APR and LE was similar (p = 0.106).

The majority of studies show a higher local control rate for patients that have undergone APR, but no survival benefit, when compared with LE. When surgery is indicated in cases of melanoma located in the anorectal junction, APR is likely required, given that LE is probably not possible in such cases. Likewise, APR can be applied to lesions within the anal canal itself, whereas those at the anal verge are benefited more by LE. APR has the advantage of controlling lymphatic spread and creating wider excision margins, resulting in a lower local recurrence rate. On the other hand, LE offers patients an apparently equivalent symptom control, in addition to the opportunity for cure, with significantly less morbidity and the avoidance of a permanent colostomy.

Current scientific evidence indicates that radical surgery does not improve survival in patients with ARM, and so APR should only be performed in patients in whom LE is not tech-
nically possible. LE can be carried out if it results in R0 resection, i.e., an adequate resection margin.\(^\text{4}\)

The planning of surgery after thorough clinical and radiologic evaluations, including magnetic resonance imaging of the pelvis and whole-body PET/CT, can aid in defining the appropriate surgical approach for achieving R0 resection.\(^\text{7}\) The goal of primary ARM resection should be to obtain negative margins, while maintaining sphincter function.\(^\text{5}\)

### Ethical considerations

The authors declare that they have met all ethical responsibilities regarding data protection, the right to privacy, informed consent.

Authorization by the ethics committee of the hospital was not necessary given that patient anonymity was never violated nor were any experimental procedures conducted that could put patient integrity at risk.

The authors declare that this article contains no personal information that could identify the patients.

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### Conflict of interest

The authors declare that there is no conflict of interest.

### References


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