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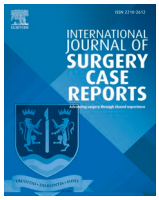

Case report

Anorectal melanoma: A case report of an unusual localization

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ABSTRACT

Introduction and importance: Primary anorectal melanoma (ARM) is a rare neoplasm with an extremely poor prognosis. It represents less than 1 % of all melanomas and accounts for less than 1 % of anorectal malignancies. We report a case of anorectal primary melanoma treated surgically.

Case presentation: A 73-year-old presented with a rectal syndrome evolving over 3 months, associated with rectal bleeding and sub-occlusive syndromes progressing in the context of general deterioration. Anal margin examination showed a protruding lesion with blackish color of the anal mucosa. Biopsies with histopathological examination concluded a malignant melanoma with necrotic changes. Locoregional staging with thoracic-abdominal-pelvic CT scan revealed a suspicious thickening of the rectum's lower wall contacting the posterior wall of the vagina, with loss of fat stranding associated with multiple mesorectal lymph nodes without distant secondary lesions. A laparoscopic proctectomy was performed.

A histopathological examination of the specimen confirmed the diagnosis with clean margins. The patient recovered uneventfully.

Discussion: Anorectal melanoma is an exceedingly rare form of cancer, comprising less than 1 % of all anorectal malignancies.

Surgical intervention remains the primary treatment modality for anorectal melanoma. Abdominoperineal resection has traditionally been the mainstay approach.

Studies have suggested that localized excision coupled with adjuvant therapies such as low-dose radiotherapy may offer comparable local control rates to traditional abdominopelvic resection while preserving sphincter function and quality of life.

Conclusion: Anorectal melanoma is a rare disease with poor prognosis. The lack of high-volume data researches shows the missing guideline for this disease.

1. Introduction and importance

Primary anorectal melanoma (ARM) is a rare neoplasm with an extremely poor prognosis. It represents less than 1 % of all melanomas and accounts for less than 1 % of anorectal malignancies [1]. ARM is documented as the third most common location of melanoma, after cutaneous and ocular melanomas. While multiple treatment options exist for ARM, surgical intervention remains the cornerstone of therapy, primarily owing to its uncommon occurrence. Abdominoperineal resection (APR) and wide local excision (WLE) are the predominant surgical approaches employed in the majority of cases. We report a case of anorectal primary melanoma treated surgically [2].

This case was reported in line with the SCARE criteria [3].

2. Case presentation

A 73-year-old hypertensive patient presented with a rectal syndrome evolving over 3 months, associated with rectal bleeding and sub-occlusive symptoms progressing in the context of general deterioration. Anal margin examination showed a protruding lesion with blackish color of the anal mucosa (Fig. 1.). Proctologic examination revealed a hemi-circumferential mass located approximately 3-4 cm from the anal margin. Endoscopy identified a 5 cm ulcerated and budding hemi-circumferential tumor in the lower rectum, which bled on contact. Biopsies, followed by histopathological examination, confirmed a malignant melanoma. Locoregional staging with thoracic-abdominal-pelvic CT scan revealed a suspicious thickening of the lower wall of the rectum, contacting the posterior wall of the vagina, with loss of fat stranding

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associated with multiple mesorectal lymph nodes without distant secondary lesions (Fig. 2). A laparoscopic proctectomy was performed (Fig. 3).

Histopathological examination of the specimen confirmed the diagnosis with clean margins. The patient recovered uneventfully.

Due to his overall degraded state (OMS 3), adjuvant therapy could not be conducted. And we lost contact with the patient 5 months after surgery.

3. Discussion

Anorectal melanoma is an exceedingly rare form of cancer, comprising less than 1 % of all anorectal malignancies. Despite its rarity, it presents a significant diagnostic challenge due to its varied clinical manifestations and lack of specific symptoms [4]. The disease can affect individuals of any age, but it most commonly presents in the sixth decade of life [5]. Diagnosing anorectal melanoma necessitates meticulous evaluation, typically relying on the absence of concurrent melanoma lesions elsewhere in the body and the exclusion of a history of previous melanoma excisions, irrespective of their anatomical location.

Symptoms of anorectal melanoma are diverse and often nonspecific, mimicking those of more common anorectal conditions such as hemorrhoids or anal fissures. Patients may report symptoms such as rectal bleeding, changes in bowel habits, pain, or the sensation of a mass in the anal canal [5]. Clinical examination may reveal an externally visible or palpable mass protruding through the anus or exhibit a dark pigmentation within the anal canal, raising suspicion for anorectal melanoma.

Confirming the diagnosis of anorectal melanoma necessitates histopathological examination of tissue samples obtained through biopsy or surgical excision. The hallmark of diagnosis lies in identifying melanin pigment within the tumor cells, typically achieved through specialized staining techniques like the FONTANA stain. However, due to the histological heterogeneity of melanomas, ancillary studies such as immunohistochemistry may be warranted to corroborate the diagnosis, especially in cases with atypical features [6].

Surgical intervention remains the primary treatment modality for anorectal melanoma. Abdominoperineal resection (APR), involving the removal of the affected portion of the rectum, anus, and regional lymph nodes, has traditionally been the mainstay approach. However, the optimal surgical approach and the extent of resection remain topics of debate. Some advocate for aggressive surgical management, aiming for clear margins and extensive lymphadenectomy, while others explore more organ-sparing techniques to minimize morbidity without compromising oncological outcomes [2].

Recent advancements in treatment strategies have sparked interest in exploring alternative approaches to surgical management. Studies have suggested that localized excision coupled with adjuvant therapies such as low-dose radiotherapy may offer comparable local control rates to traditional abdominopelvic resection while preserving sphincter function and quality of life [7]. However, further research is warranted to elucidate the long-term efficacy and safety of these novel therapeutic

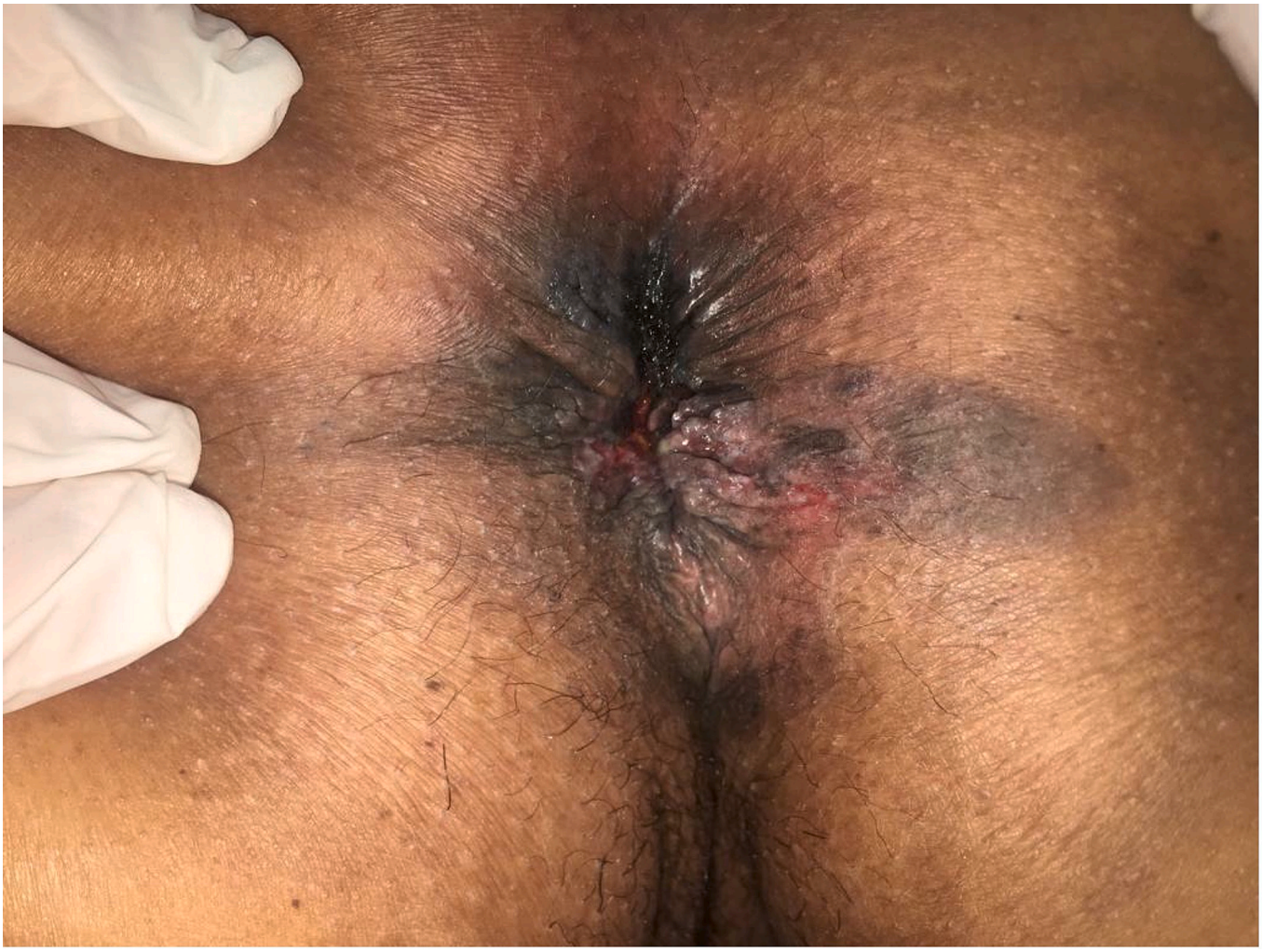

Fig. 1. Anal margin examination showed a protruding lesion with blackish color of the anal mucosa.

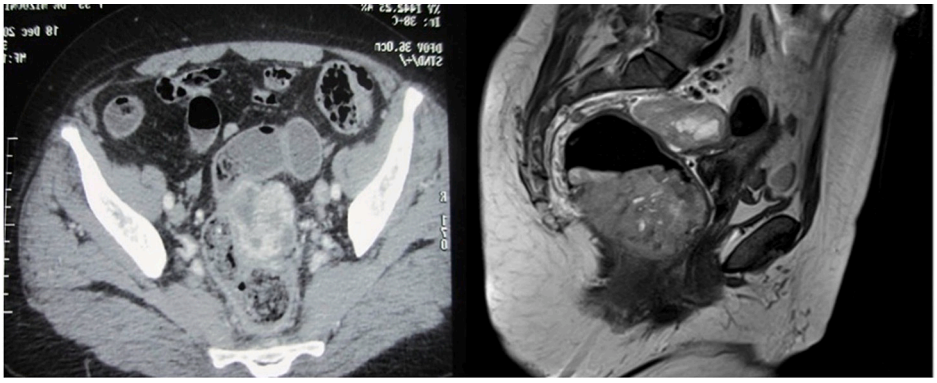

Fig. 2. Suspicious thickening of the rectum's lower wall contacting the posterior wall of the vagina, with loss of fat stranding associated with multiple mesorectal lymph nodes.

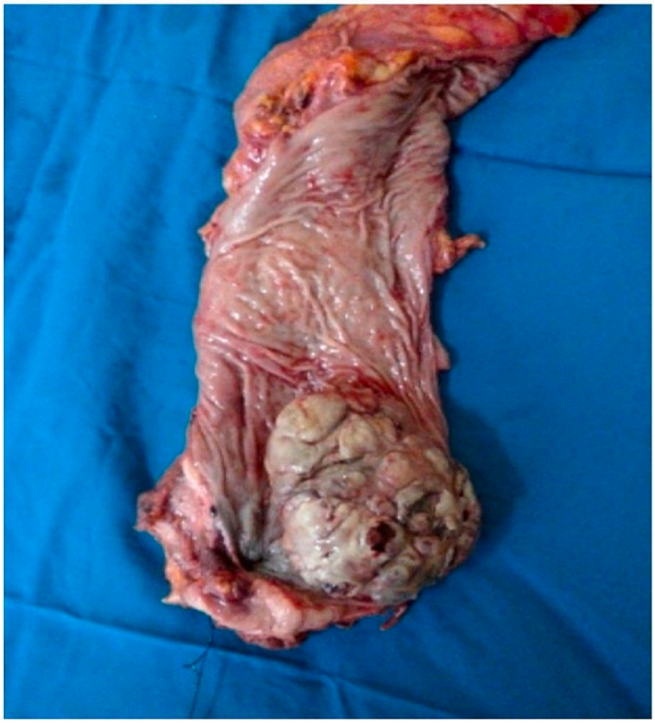

Fig. 3. Proctectomy specimen.

approaches.

4. Conclusion

Anorectal melanoma is a rare disease with poor prognosis. The lack of high-volume data researches shows highlights the absence of guidelines for this disease. Early-stage diagnosis and surgical management can help patients with anorectal melanoma improve their overall survival.

Author contribution

Souhaib Atri, CONCEPTUALISATION, REDACTION, DATA CURATION, PROJECT ADMINISTRATION

Ouadi Yacine, CONCEPTUALISATION, REDACTION, DATA CURATION, PROJECT ADMINISTRATION

Hammami Mahdi CONCEPTUALISATION, REDACTION,

Sebai Amine REDACTION PHOTOGRAPHY RENDERING, DATA CURATION

Haddad Anis SUPERVISION, VALIDATION, VISUALISATION

Montasser Kacem SUPERVISION, VALIDATION, VISUALISATION

Consent

Written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal on request.

Ethical approval

We confirm that ethical approval is exempt/waived at our institution from the ethical community of La Rabta University Hospital of Tunis (Tunisia) for this case report.

Guarantor

Ouadi Yacine.

Research registration number

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Conflict of interest statement

All authors declare they have no conflict of interest.

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