Journal Homepage: - www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/12288
DOI URL: http://dx.doi.org/10.21474/IJAR01/12288

RESEARCH ARTICLE

UNCOMMON ANORECTAL PATHOLOGY: ANORECTAL MELANOMA

Fatima Boukis, Imane Boujguenna, Anass Fakhri and Hanane Rais
Pathology Department, Mohammed Vi University Hospital, Marrakech, Morocco.

Manuscript Info

Manuscript History
Received: 05 November 2020
Final Accepted: 10 December 2020
Published: January 2021

Abstract

Anorectal melanoma (AM) is a rare and aggressive tumor, characterized by a poor prognosis. It accounts for 0.4–1.6% of all melanomas, and only 1% of anorectal malignant tumors [1]. It is difficult to diagnose due to the hidden site and nonspecific symptoms, occurring usually at a late stage. The most common symptom is rectal bleeding. There are various histological variants of AM. There is currently no consensus of treatment; the typical therapeutic approach remains surgical resection; however, this is not associated with improved overall survival [2,3]. We present a case of a 52-year old male complaining of rectal bleeding and pain for about 4 months, which were attributed to hemorrhoids. Rectal examination revealed an irregular mass near the anal verge. Biopsies were taken for analysis, they were fixed in 10% formalin, paraffin embedded and routinely stained with Hematoxylin– Eosin. Immunohistochemical investigations were done by using antibodies against cytokeratin (CK), P40, HMB45 and Melan A.

Introduction:-

Anorectal melanomas are very rare tumors accounting for only 1% of anorectal malignant tumors. The most common symptom is rectal bleeding, followed by tenesmus, pruritus, proctalgia [1]. Assessment of pigmented lesions located on hidden areas is difficult. The disease is often incorrectly labeled as hemorrhoids or rectal polyps; causing a delay in diagnosis and explaining why the patients present with locally advanced disease and 60–70% of them already have metastases [4]. In this paper, we report a new case masquerading as hemorrhoids.

Case Report:

The patient, a 52-year old male with no with no significant past medical history,complaints of rectal bleeding and pain for about 4 months, which were attributed to hemorrhoids.

Rectal examination revealed an irregular mass near the anal verge. Colonoscopy showed a 36 mm lesion on the posterior wall of the rectum, within 2 cm of the anal verge. Biopsies were taken for analysis. They were fixed in 10% formalin, paraffin embedded and routinely stained with Hematoxylin Eosin.

Microscopic examination showed a malignant proliferation; the tumor cells were pleomorphic, round or polygonal, with abundant cytoplasm and irregular anisokaryotic hyperchromatic nuclei, highly atypical with numerous mitoses. Multiples levels for Hematoxylin Eosin staining were performed with no evidence of melanin pigmentation in the cytoplasm (Fig1). Immunohistochemistry analyses were performed to characterize the nature of the tumor; using

Corresponding Author:- Fatima Boukis
Address:- Pathology Department, Mohammed Vi University Hospital, Marrakech, Morocco.

antibodies against cytokeratin (CK), P40, HMB45 and Melan A. Immunohistochemistry stained positive for HMB45 and Melan A antibodies. It showed lack of expression of tumor cells of Cytokeratin and P40 antibodies (Fig2).

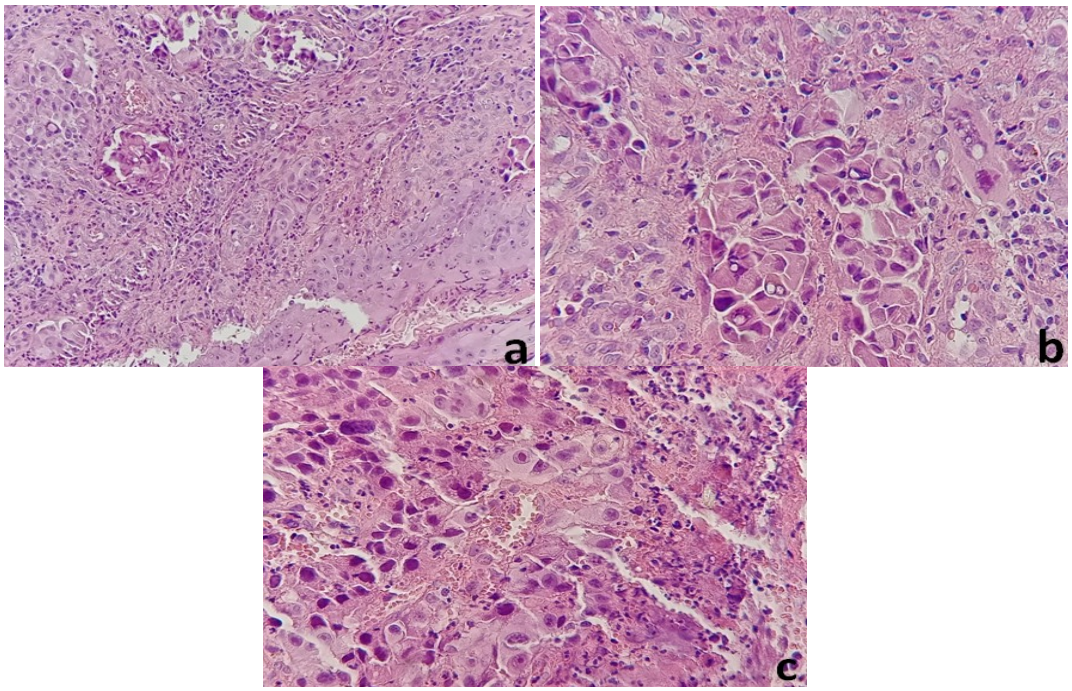

Figure 1:- Hematoxylin Eosin stain showing Highly pleomorphic cells (a x10; b x20; c x40).

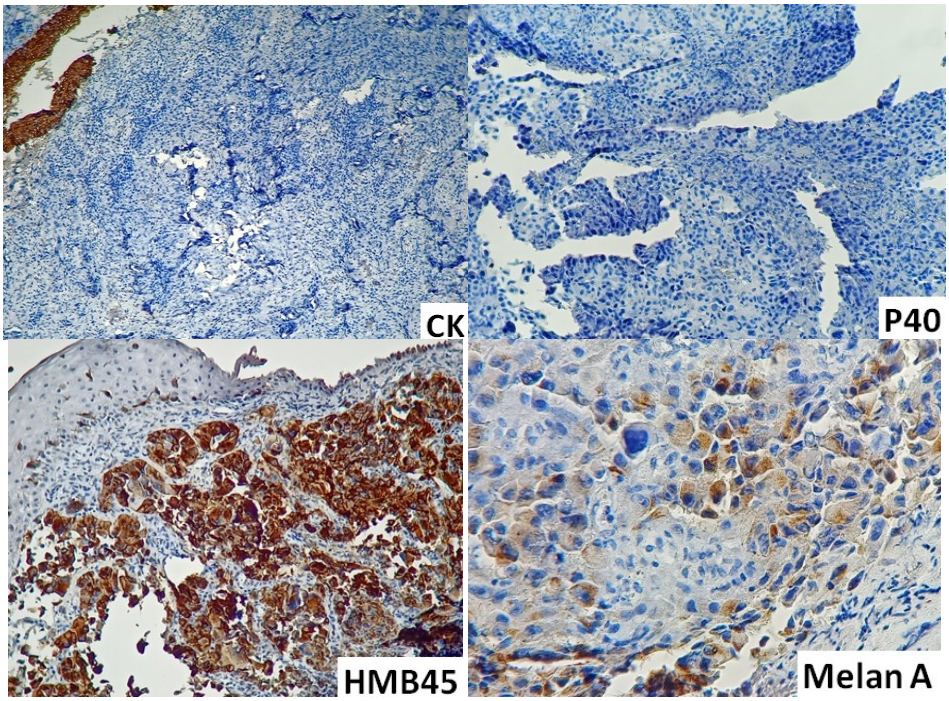

Figure 2:- Immunohistochemistry showing positive stain for HMB45 and Melan A antibodies and lack of expression of tumor cells of Cytokeratin and P40 antibodies.

Discussion:-

Anorectal melanoma is uncommon anorectal pathology, with a poor prognosis. It accounts for 0.4–1.6% of all melanomas, and only 1% of anorectal malignant tumors. AM lacks subjective symptoms in the early stage. The

most common symptom is rectal bleeding, followed by tenesmus, pruritus, proctalgia [1]. Assessment of pigmented lesions located on hidden areas is difficult. The disease is often incorrectly labeled as hemorrhoids or rectal polyps; causing a delay in diagnosis and explaining why the patients present with locally advanced disease and metastases [4, 5].

The patient presented here complained of rectal bleeding which were attributed to hemorrhoids. Histopathologically, AM shows considerable variability regarding the size and type of cells. AM can be epithelioid, the spindle-cell, the lymphoma-like, and pleomorphic AM [6]. They can be misdiagnosed as epidermoid carcinoma, small round cell sarcoma, malignant lymphoma, spindle cell sarcoma and gastrointestinal stromal tumour. Pigmented lesions of the anorectal tract are always highly suspect for melanoma. When pigment is absent, the diagnosis is more difficult; for this reason, an accurate immunohistochemical analysis plays a pivotal role in the diagnosis of AM [7].

S100 protein is highly sensitive for melanocytic differentiation; the cell population of AM usually shows a strong positivity, it is used as a screening tool due to lack of specificity. Melan-A, and HMB-45 have high specificity for melanocytic lesions, although their sensitivity is lower than S100 protein with a variability in strength and distribution. AM is usually negative for pan-cytokeratin; a misdiagnosis with a poorly differentiated rectal carcinoma is possible because up to 10% of melanomas can show an expression of a keratin and/or epithelial marker [6].

The literature reports surgery as the most effective treatment for AM. However, it does not result in real improvement of the overall survival [8]. With the advent of targeted therapy, a higher number of therapeutic choices are available; however, the treatment of AM remains an important challenge. Currently, association of anti-BRAF antibody and MEK inhibitors are available for BRAF-positive metastatic cutaneous melanoma; however, there are no data for metastatic AM. Because the percentage of AM with BRAF mutation is low, the use of anti-BRAF antibodyin AM is not currently a pivotal therapeutic option [7,9].

Conclusion:-

AM is a rare and aggressive malignancy. Patients usually present with advanced disease. There is no standardized medical and/ or surgical therapy due to the rarity and biological heterogeneity of this malignancy. Further studies are needed to improve survival and quality of life of AM patients.

Conflict of Interest:

The authors declare that they have no competing interests.

References:-

1. Schaefer T, Satzger I, Gutzmer R. Clinics, prognosis and new therapeutic options in patients with mucosal melanoma. A retrospective analysis of 75 patients. Medicine (Baltimore). 2017 Jan;96(1):e5753.
2. McBrearty A, Porter D, McCallion K. Anal melanoma: A general surgical experience. J Clin Case Rep. 2015;5:493.
3. Van Schaik P, Ernst M, Meijer H, Bosscha K. Melanoma of the rectum: A rare entity. World J Gastroenterol. 2008 Mar 14;14(10):1633–1635.
4. Khan M, Bucher N, Elhassan A, Barbaryan A, Ali AM, Hussain N, et al. Primary anorectal melanoma. Case Rep Oncol. 2014 Jan–Apr;7(1):164–70.
5. Podnos YD, Tsai NC, Smith D, et al. Factors affecting survival in patients with anal melanoma. Am Surgeon 2006;72:917–20.
6. Chute DJ, Cousar JB, Mills SE. Anorectal malignant melanoma: Morphologic and immunohistochemical features. Am J Clin Pathol. 2006 Jul;126(1):93–100.
7. Scott JF, Gerstenblith MR, editors. Brisbane (AU): Codon Publications; 2018 Mar.
8. Falch C, Mueller S, Kirschniak A, Braun M, Koenigsrainer A, Klumpp B. Anorectal malignant melanoma: Curative abdominoperineal resection: patient selection with 18F-FDG-PET/CT. World J Surg Oncol. 2016;14:185.
9. Khalil DN, Carvajal RD. Treatments for noncutaneous melanoma. Hematol Oncol Clin North Am. 2014 Jun;28(3):507–21.