

## Cutaneous metastases of prostatic carcinoma: A new case report

Besma Laabidi<sup>1,2</sup>, Aya Khemir<sup>1,2</sup>, Faten Gargouri<sup>1,2</sup>, Nada Mansouri<sup>1,2</sup>, Issam Msakni<sup>1,2</sup>

<sup>1</sup>Pathology Department, Military Hospital of Tunis, Monfleury, Tunis, Tunisia, <sup>2</sup>Faculty of Medicine of Tunis, University of Tunis el Manar, Tunis, Tunisia

Corresponding author: Aya Khemir, MD, E-mail: dr.ayakhemir@gmail.com

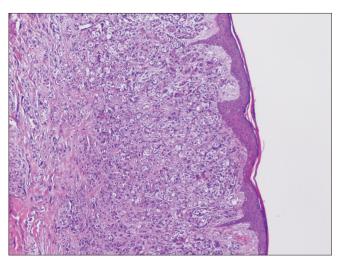
Sir,

Infiltration of the skin by a nonmelanocytic tumor is rare, with its incidence varying from 0.6% to 10% of cases. SM is associated with less than 10% of deep cancers [1,2]. It is usually mammary and pulmonary carcinomas that produce SM [3]. In the genitourinary tract, prostatic cancer occupies the third place in cancers metastasizing to the skin [2]. Usually, patients present themselves with multiple eruptive bluish nodules [1,2,4,5], and may undergo surgical excision, chemotherapy, or radiation therapy [5].

A 74-year-old male operated for prostatic carcinoma persistent for one year presented himself with purplish nodules on the left groin. A microscopic examination of biopsy specimens revealed the occupation of the dermis by a malignant proliferation. The tumor cells were arranged in clusters (Fig. 1). Nuclei were pleomorphic with prominent nucleoli (Fig. 2). Immunohistochemical staining revealed positivity for PSA antibodies (Fig. 3). The diagnosis of cutaneous metastasis from a prostatic carcinoma was maintained.

Prostatic cancer is the most frequent non-cutaneous cancer in males [3-5]. Studies published in the literature have shown that SM occurs in elderly patients aged above 60 years, as in our case [1]. SM from prostatic cancer accounts for nearly 0.36% of cases, and has lately been increasing in frequency [3]. Cases of prostatic cancer revealed by SM have been reported in the literature, yet these are rare [1]. The diagnosis of SM from prostatic cancer may be reached by fine needle aspiration or from biopsy specimens, although some authors believe that a histological examination is

needless if the patient already suffers from an advanced stage of the disease [5]. On gross examination, SM from prostatic cancer manifests itself as pinkish and fleshy nodules [2]. The pathologic features of SM from prostatic cancer are the same as those described for primary tumors [1,3,4]. In the case of a poorly differentiated or undifferentiated carcinoma, the diagnosis may be difficult, and SM from prostatic cancer is hard to differentiate from primary skin tumors in such cases [2]. PSA is highly specific of prostatic carcinoma but negative staining does not exclude the diagnosis of prostatic carcinoma, especially in the case of the undifferentiated forms. PSA may be expressed in undifferentiated neuroendocrine carcinomas and small cell carcinomas of the lungs [5]. Other immunohistochemical markers, such as NKX3.1, have been tested. The last showed positivity of tumor cells in



**Figure 1:** A malignant proliferation invading the dermis, with the tumor cells arranged in narrow cords and clusters (H&E, 40×).

How to cite this article: Laabidi B, Khemir A, Gargouri F, Mansouri N, Msakni I. Cutaneous metastases of prostatic carcinoma: A new case report. Our Dermatol Online. 2021;12(2):210-211.

**Submission:** 10.10.2020; **Acceptance:** 10.12.2020

**DOI:** 10.7241/ourd.20212.32

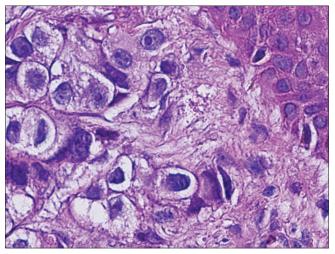


Figure 2: Malignant cells with hyperchromatic irregular nuclei and prominent nucleoli (H&E, 400×).

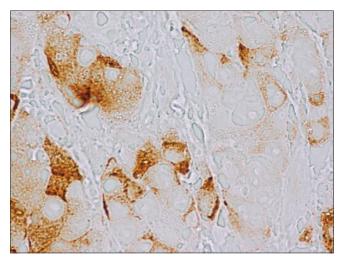


Figure 3: PSA antibody staining showing strong and diffuse cytoplasmic positivity of the tumor cells (400×).

SM from prostatic cancer and, therefore, may be helpful in the diagnosis [1,4]. Primary adnexal carcinoma is the main differential diagnosis. Lymphovascular invasion is in favor of cutaneous metastases [1,3,4]. Ivan et al., in their study, have shown that p63 antibodies may help in distinguishing primary adnexal carcinoma from

SM. p63 was positive in all adnexal carcinomas and negative in metastases. The same results were found with D2-40 antibodies [1]. Therapeutics are limited to palliative options. Patients may undergo surgical excision, chemotherapy, or radiation therapy. SM from prostatic cancer is a rare phenomenon. Survival rates in patients with SM do not, on the average, exceed seven months [5]. Since SM presents itself at an advanced stage of the disease, it is usually associated with poor prognoses. Almost 95% of the patients die within a year of being diagnosed with SM [1].

## Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

The authors certify that they have obtained all appropriate patient consent forms, in which the patients gave their consent for images and other clinical information to be included in the journal. The patients understand that their names and initials will not be published and due effort will be made to conceal their identity, but that anonymity cannot be guaranteed.

## **REFERENCES**

- Ruiz SJ, Al Salihi S, Prieto VG, Nagarajan P, Tetzlaff MT, Curry JL, et al. Unusual cutaneous metastatic carcinoma. Ann Diagn Pathol. 2019;43:151399.
- Kavak A, Yılmaz M, Çam HK, Tuğcu V, Albayrak H, Sakız D, et al. Cutaneous metastasis in prostate cancer: Two cases with similar clinical findings. J Cancer Res Ther. 2018;14(Supplement):S1213-6.
- Patne SCU, Naik B, Patnaik P, Trivedi S. Cutaneous metastases of prostatic adenocarcinoma. J Cytol. 2015;32:121-3.
- Wong JK, Minni JP, Nowak MA. A novel case of NKX3.1positive metastatic cutaneous prostate cancer. Dermatol Online J. 2018;24:13030.
- Brown G, Kurtzman D, Lian F, Sligh J. Eruptive nodules of the head and neck: A case report of metastatic prostate cancer. Dermatol Online J. 2014;20:doi\_21544.

Copyright by Besma Laabidi, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Source of Support: Nil, Conflict of Interest: None declared.

© Our Dermatol Online 2.2021