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A case of primary malignant melanoma of the penis and urethra

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Dear editor;

Malignant melanoma (MM) is a neoplasm which is derived from the melanocytes in the basal layer of the skin and causes high morbidity and mortality in affected patients. Penile MM (PMM), responsible for 0.1-0.2% of all MMs, comprises less than 1.4% of all primary malignancies involving the penis (1). We aimed in the present study to report a case with penile and urethral MM.

A 49-year-old male patient was admitted to our clinic, complaining of dysuria and initial hematuria for around 7 months, and the presence of masses within his penis for around 2 months. The physical examination revealed multiple, hard, fixed nodular lesions possessing irregular borders and featuring regional pigmentation, as well as a mass lesion with irregular borders which protruded from the external meatus (Figure 1). Erythrocytes were spotted (1+) in urinalysis. The abdominal CT scan, performed in an attempt to elucidate the etiology of the hematuria, depicted no pathology. The patient was given a general anesthesia, the glans penis was dissected, and this was followed by multiple incisional biopsy sampling from the mass lesion which showed a 1 cm-long extension from the external meatus inward. The urinary bladder was observed to be unremarkable during cystoscopy. The pathological examination of the biopsy specimens obtained from the lesions in the glans penis and urethra revealed large, hyperchromatic, pleomorphic and atypical melanocytes. On the basis of positive immunohistochemical staining with HMB45, a definitive diagnosis of invasive malignant melanoma was established (figure 2). The patient was informed of the plan for a surgical operation encompassing radical penectomy and bilateral inguinal radical lymph node dissection. However, he refused all surgical treatment and died elsewhere of multiple organ metastasis 6 months after the definitive diagnosis (lungs, brain, liver).

Penil malignant melanoma is most frequently located on the glans (55%), followed by the prepuce (28%), penile shaft (9%) and urethral meatus (8%) (2). Roughly speaking, the primary neoplasm may appear as a flat dark macule, ulcer or black, bluish or red nodule (3). Breslow thickness of the primary melanoma, T stage in the American Joint Committee on Cancer TNM classification and ulceration are the most important prognostic factors (4). The pivotal factor deter

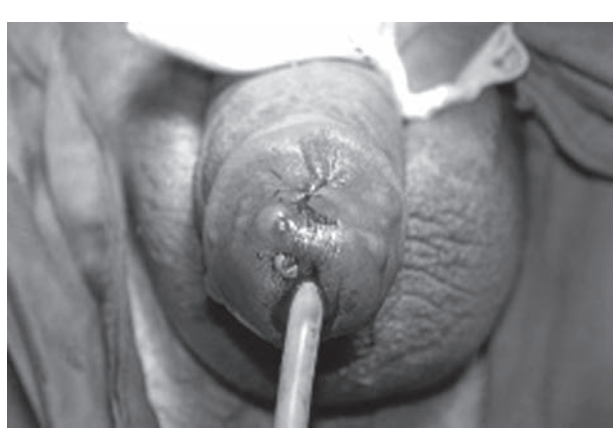

Figure 1. Multiple, hard, fixed nodular lesions possessing irregular borders and featured by regional pigmentation.

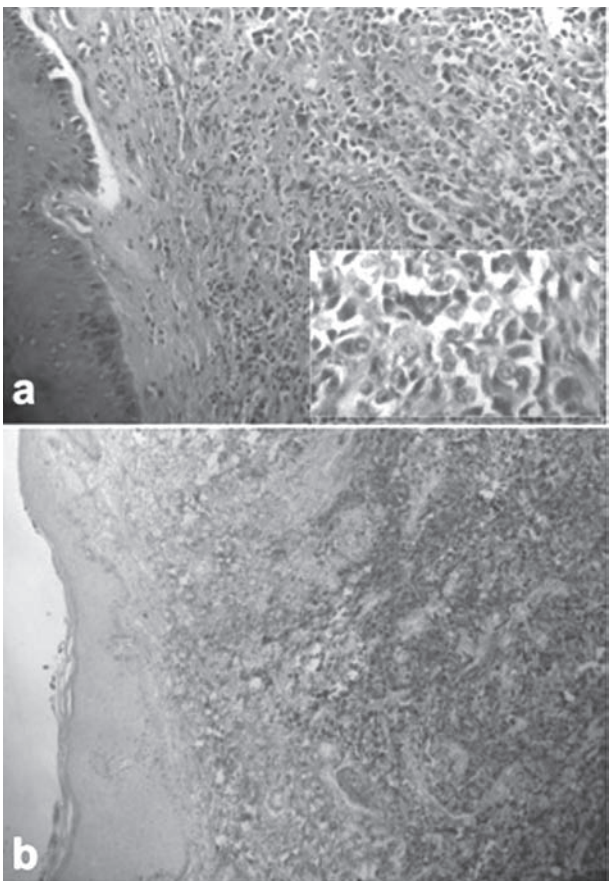

Figure 2. a) Atypical melanocytes were arranged a single or nest in the dermis (hematoxylin and eosin x200), Inset At higher magnification atypical nuclear features of the neoplastic melanocytes were evidens (hematoxylin and eosin x400). The cells were large, hyperchromatic and pleomorphic. b) They were positive for HMB45 (x40).

mining the survival from MM is the establishment of a definitive diagnosis in the early stages of the disease. Penile-urethral surgery, along with inguinal lymph node biopsy or dissection comprises the most important step of the treatment. Current chemotherapy is single agent dacarbazine, temozolomide or cisplatin in advanced stages (4). Administration of high dose interferon alpha-2b may also be considered in selected patients with good performance status (2).

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