

## MALIGNANT MELANOMA IN PENILE FORESKIN

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We report a case of stage I malignant melanoma of the penis (confined to the penis). A 74-year-old uncircumcised man noticed a nonhealing, painless black lesion in penile foreskin and visited our institute. As the lesion was confined to the prepuce, the patient underwent circumcision for treatment and histological diagnosis. Histological examination revealed a malignant melanoma composed of epithelioid melanocytes. Ten months later, he is currently alive, without recurrence or metastasis.

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**Key words:** Penile malignant melanoma, Stage I, Circumcision for treatment and histological examination

### INTRODUCTION

The penis is a rare primary site for malignant melanoma. Begun et al. reported 56 cases of penile malignant melanoma since 1859<sup>1)</sup>. We report on a patient with a malignant melanoma in penile foreskin who underwent circumcision for treatment and histological diagnosis.

### CASE REPORT

A 74-year-old uncircumcised man noticed a nonhealing, painless black lesion in penile foreskin in the middle of January, 2003. As the lesion spread rapidly with a 2 cm in size, he visited our hospital on



Fig. 1. Malignant melanoma confined to penile foreskin.

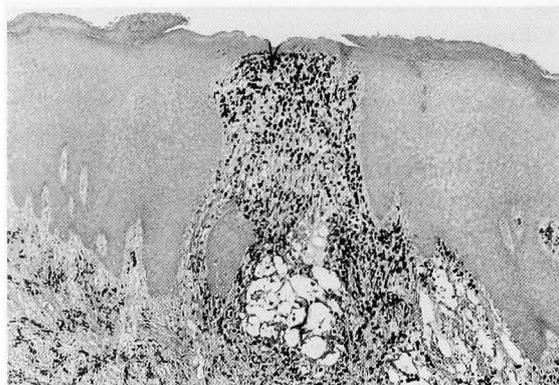


Fig. 2. Histological section of the lesion showed a malignant melanoma. The tumor cells proliferated in dermis and invaded into epidermis of the penile foreskin and the abundant cytoplasm contained melanin granules (H-E staining).

February 12, 2003. As the lesion was confined to penile foreskin (Fig. 1), the patient underwent circumcision for treatment and histological diagnosis under local anesthesia. Histological examination revealed a malignant melanoma composed of epithelioid melanocytes (Fig. 2). The tumor cells proliferated in dermis and invaded into epidermis of the penile foreskin and the abundant cytoplasm contained melanin granules (H-E staining).

Tumor thickness was more than 4 mm, without ulceration. As bilateral inguinal lymph nodes were not palpable, and chest X-ray and abdominal computed tomography (CT) showed no abnormal findings, we diagnosed this case as stage I penile malignant melanoma according to the classification of Bracken and Diokno<sup>2)</sup>. We recommended him to

undergo combination chemotherapy {Nimustine hydrochloride (ACNU), vincristine (VCR) and Dacarbazine (DTIC)} as adjuvant therapy, however he declined. Ten months later, the patient is currently alive without recurrence or metastasis.

### DISCUSSION

Malignant melanoma of the penis is rare and accounts for 1.4% of penile malignancy of 777 patients in Mayo clinic<sup>3)</sup>. Penile malignant melanoma is reported to be located most commonly on the glans (67%) and arises in decreasing frequencies on the prepuce (13%), urethral meatus (10%), penile shaft (7%) and finally coronal sulcus (3%)<sup>4)</sup>. Clinical staging in most published cases follows that of Bracken and Diokno: stage I-melanoma confined to the penis, stage II-spread to the inguinal lymph nodes and stage III-distant metastasis<sup>2)</sup>. As the bilateral inguinal lymph nodes were not palpable and chest X-ray and abdominal CT showed no mass lesion, and the lesion was confined to penile foreskin, we diagnosed this case as stage I penile malignant melanoma. Stage II and III diseases carry a poor prognosis, mainly because of the lack of effective adjuvant systemic therapy<sup>4)</sup>. Einhorn et al. reported that patients with disseminated melanoma treated with chemotherapy had a median survival of about 5 months<sup>5)</sup>. However, combination chemotherapy with ACNU, VCR and DTIC showed a response rate of 23% in the patients with disseminated malignant melanoma<sup>6)</sup>, and the survival rate was somewhat, but not significantly, higher in the patients with advanced melanoma who received chemotherapy. Examples of chemotherapy regimens were as follows: DTIC+ACNU+VCR+interferon, cisplatin (CDDP)+DTIC+vindesine (VDS), DTIC+ACNU+CDDP+tamoxifen<sup>7)</sup>.

In Japan, recently 28 cases of malignant melanoma of the penis since 1924 were summarized<sup>8)</sup> according to the new AJCC-TNM classification<sup>9)</sup>: 5 cases in stage I, 3 cases in stage II, 14 cases in stage III, 6 cases in stage IV. Due to the new AJCC-TNM classification, our case was diagnosed as clinical stage IIB (T4aN0M0) penile malignant melanoma, because the tumor thickness was more than 4 mm, without ulceration and no regional lymph node metastasis, and no distant metastasis.

Treatment of stage I malignant melanoma of the penis (Bracken's stage I) is surgical. Because most lesions are located on the glans, a distal amputation or wide local excision may suffice. For penile melanoma, a surgical margin of 1 to 5 cm should be adjusted individually according to tumor thickness and invasive potential<sup>3)</sup>. Thicker melanomas produce a higher risk of vascular or lymphatic invasion<sup>7)</sup>.

Combination chemotherapy is recommended as adjuvant therapy in case of tumor thickness is more than 1.5 mm. For the patients with stage II diseases (inguinal lymph node metastasis), lymph node resection is indicated, because for some patients, lymph node removal might be curative<sup>3)</sup>, and combination chemotherapy is indicated as adjuvant therapy. For the patients with stage III disease (distant metastasis), lymphadenectomy is avoided unless warranted for palliation of local symptoms<sup>3)</sup>. In Japan, 5 patients with stage III penile malignant melanoma died within one year<sup>8)</sup>. Patients with disseminated melanoma should be treated with well-tolerated drug regimens or in combination with interferon<sup>10)</sup>.

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和文抄録

亀頭包皮に局限した Malignant melanoma の 1 例

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Stage I の陰茎 malignant melanoma の 1 症例を報告する。74歳の包茎患者が亀頭包皮部に治癒しない。痛みのない黒色の病変に気づき、われわれの施設を来院した。病変が亀頭包皮部に局限していたため、病変の治療と組織診断のため、包皮環状切除術を施行し

た。組織所見は malignant melanoma であった。術後、10カ月を経過したが、患者は再発や転移を認めず、生存している。

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