Malignant priapism secondary to osteogenic sarcoma

Sir,

Metastatic involvement of the penis is relatively rare, compared to its primary counterpart, despite rich vascularization and extensive circulatory communication between the penis and the neighboring organs. The vast majority of the primary lesions are in the genitourinary organs with the recto-sigmoid region contributing to the bulk of the remainder.[1,2] Penile involvement is usually associated with disseminated disease and generally portends a poor prognosis.[3]

A 28-year-old male presented with history of priapism of 4 weeks duration. Initially, this erection was painful for about a week and later became painless. The patient presented with no voiding symptoms. No history of any medication was noted. This patient had undergone high above knee amputation for osteogenic sarcoma of Lt femur 12 weeks before. Conservative treatments including medications, injections were given so as to reduce the erection. Winter's procedure was done and biopsy was done at the same time. All conservative measures to correct the pripism failed. Ischemic changes started appearing on the glans within 2 weeks following presentation to us. In view of the the ischemic changes [Figures 1 and 2], it was decided to perform total penectomy with perineal urethrostomy. Chest X-ray revealed two cannonball metastases. Biopsy revealed malignant neoplasm consisting of typical spindle-shaped cells. These cells exhibited pleomorphism, hyperchromatic nuclei and abnormal mitoses. Numerous tumor giant cells were seen [Figure 3]. The features were consistent with metastatic osteogenic sarcoma. The patient was started on chemotherapy under the care of medical oncologist. At last follow-up of 8 months following penectomy, the patient was responding well to chemotherapy.

Approximately 370 cases of penile metastases have been reported up to 2006[4] from a wide range of primary sites including prostate (34%), bladder (30%), recto-sigmoid and rectum (13%). Penile metastases usually present as a penile lesion, priapism or rarely as isolated glans penis and preputial lesions. Up to 40% of penile metastases present as malignant priapism[3]. It could be caused either by occlusion of the draining veins or secondary to thrombosis in the cavernosal spaces caused by infiltrating tumor cells.[3] Pain is not a prominent symptom in most patients, and when present, is localized partly to the penis and partly to the perineum.[5] Obstructive voiding symptoms and hematuria are very rarely reported.[3]

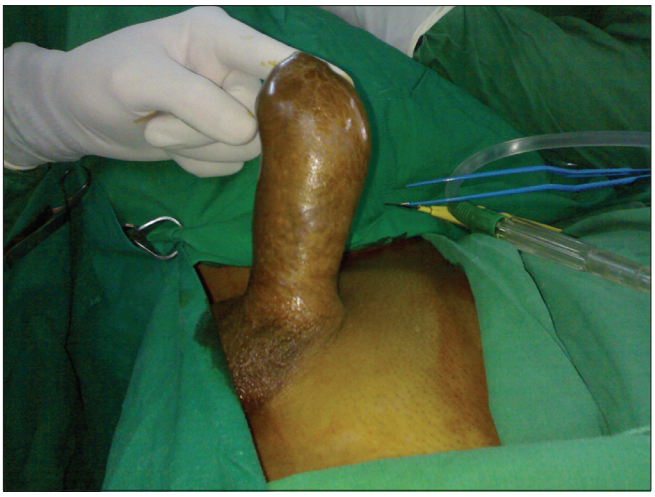

Figure 1: Long-standing priapism

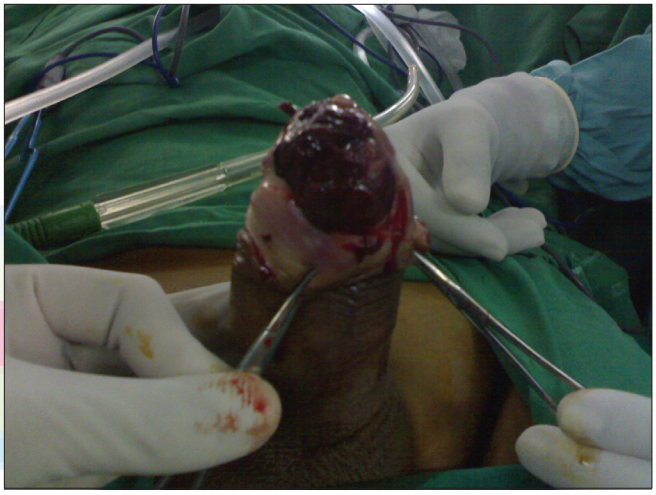

Figure 2: Ischemic glans and penis after 4 weeks of priapism

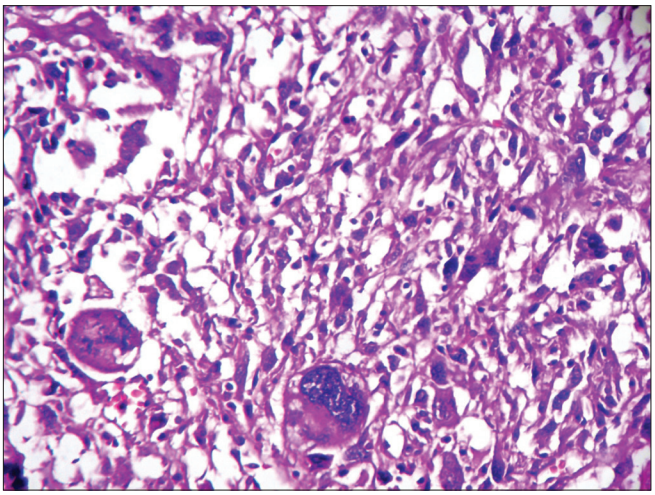

Figure 3: Osteogenic sarcoma with tumor giant cells atypical spindle-shaped cells

Diagnosis is usually made by biopsy or corporeal aspiration, which helps to differentiate between metastases and primary tumors. Computed tomography (CT) and magnetic resonance imaging (MRI) scanning are reliable imaging modalities to confirm the diagnosis and assess the extent of the disease. The choice of treatment is greatly influenced by the general health of the patient. Most patients require only supportive or palliative therapy. Local excision, partial or complete penectomy, radiotherapy and chemotherapy have all yielded uniformly poor results.

Nerli RB, Koura A, Prabha V, Alur SB, Devaraju S, Godhi S, Hiremath MB
Department of Urology,
KLE University's KLES Kidney Foundation,
KLES Dr. Prabhakar Kore Hospital & MRC,
Belgaum – 590 010, India

Correspondence: Dr. Rajendra B. Nerli,
E-mail: rajendranerli@yahoo.in

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