

CASE REPORT

SARCOMATOID CARCINOMA OF PENIS: A RARE PENILE NEOPLASM

Koujalagi R. S¹, Uppin S. M², Togale M. D³, Chetan J. V⁴

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ABSTRACT: Sarcomatoid carcinomas are high grade, biphasic, uncommon neoplasms which can occur in any part of the body. Sarcomatoid carcinoma of penis is very rare representing only 1% - 2% of all penile cancers. Only a few cases of sarcomatoid carcinoma of penis have been reported in the literature. Few authors consider this as a variant of squamous cell carcinoma. The tumour has both lymphatic and hematogenic spread and is a very aggressive tumour and has a high mortality rate. Treatment is surgical excision. Tissue sections show both epithelial and mesenchymal components. We report a 70 year old man with sarcomatoid carcinoma of penis which was confirmed by immunohistochemistry.

KEYWORDS: SARCOMATOID, CARCINOMA, PENIS.

INTRODUCTION: Incidence of penile cancers in India is 1.8 in 1 lakh population. Around 95% of penile cancers are squamous cell carcinoma.¹ Most authors consider sarcomatoid carcinoma of penis as a variant of squamous cell carcinoma.^{2,3}

Sarcomatoid carcinomas account for only 1% - 2% of penile carcinomas.⁴ Microscopic diagnosis of this is very challenging since it contains biphasic patterns of pleomorphic spindle cells along with components of squamous cell carcinoma. Hence it is also called biphasic squamous cell carcinoma or the spindle cell carcinoma. These patients express both epithelial and mesenchymal antigens.

We present a case of sarcomatoid carcinoma of penis, confirmed by immunohistochemistry, and treated in our hospital.

CASE REPORT: A 70 year old male presented with a history of ulcerated growth over the penis since 5 months and left inguinal swelling of 3 months duration. Patient had undergone biopsy outside. Examination revealed a 4 x 3 cms ulcerated swelling involving glans on the dorsal side. Induration of 2 cms was present around the swelling. Urethral meatus was not involved. There was matted left inguinal lymphadenopathy of size 10 x 8 cms, hard in consistency. Patient had come with the histopathology report of the biopsy done outside with the diagnosis of Malignant Fibrous Histiocytoma. FNAC of the left inguinal lymphadenopathy showed squamous cell carcinoma. Patient was told to get the biopsy block prepared outside and we sent it for immunohistochemistry which came as Positive sarcomatoid carcinoma. His chest radiograph had no abnormalities.

Patient underwent total penectomy with left inguinal lymph node dissection with perineal urethrostomy. Histopathology report of the excised tumour came as Angiosarcoma. [The differential diagnosis of carcinosarcoma includes leiomyosarcoma, angiosarcoma, amelanotic melanoma among others.]⁴

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Postoperatively patient was discharged as he wanted to undergo chemotherapy elsewhere. Patient was lost to follow up.

DISCUSSION: Sarcomatoid carcinoma is uncommon, high grade and aggressive tumour. Only few cases arising from penis have been reported.^{2,3,5,6} It has high mortality rate ranging from 40-75%.³ Median age of occurrence is 59 years.³ Incidence of inguinal lymph node metastasis ranges from 75-89% and there is local recurrence in 67% of the patients.⁷ Grossly, tumours are large, polypoidal and ulcerated masses frequently affecting glans(93%) and deeply invading corpora cavernosa (80%). Histopathological diagnosis of sarcomatoid carcinoma is very challenging.

It is composed of atypical spindle cells disposed in interlacing fascicles, resembling fibrosarcoma or leiomyosarcoma, sometimes admixed with pleomorphic giant cells mimicking malignant fibrous histiocytoma. They may also contain focal areas which are pseudoangiomatous, areas of necrosis and mitotic activity. Differential diagnosis include leiomyosarcoma, angiosarcoma, amelanotic melanoma among others.^{5,8,9} Immunohistochemically sarcomatoid carcinomas are positive for keratin and vimentin and negative for muscle specific actin, desmin, HMB 45 and S 100.⁸

Exact histogenesis of this tumour is not well understood. Most authors believe it to be as a result of dedifferentiation or as a result of premature block during differentiation.³ Some believe it to be because of late mutation during natural progression of the disease. There is no standard curative therapy for patients with advanced or metastatic disease, and treatment is directed at palliation. Palliative surgery may be considered for the control of local penile lesions in patients with advanced, ulcerated or infiltrating tumors, providing temporary tumor regression and decreasing pain and bleeding. The role of chemotherapy has not been extensively explored, and is limited to small series based on type 3 level of evidence.

Thus, the diagnosis of sarcomatoid carcinoma of penis is difficult and the ultimate way of diagnosing is by immunohistochemistry.¹⁰

Since hemato-genous and lymphogenous metastases readily occur, early diagnosis and treatment is the only coping method.¹¹ Therefore, efforts should be made to disseminate methods for an early diagnosis.

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Fig. 1: Carcinoma of penis

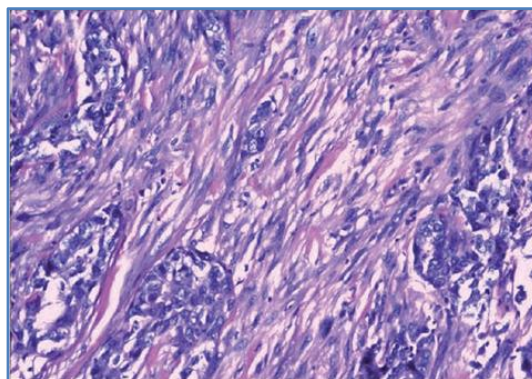


Fig. 2: Histopathology of carcinoma penis

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AUTHORS:

1. Koujalagi R. S.
2. Uppin S. M.
3. Togale M. D.
4. Chetan J. V.

PARTICULARS OF CONTRIBUTORS:

1. Assistant Professor, Department of General Surgery, JNMC, Belgaum.
2. Professor, Department of General Surgery, JNMC, Belgaum.
3. Assistant Professor, Department of General Surgery, JNMC, Belgaum.
4. Post Graduate Student, Department of General Surgery, JNMC, Belgaum.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Koujalagi R. S,
Assistant Professor,
Department of General Surgery,
JNMC, Belgaum.
E-mail: rameshkoujalagirenuka@rediffmail.com

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