# **Case Report**

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# Primary cutaneous mucinous carcinoma of the penis

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### **ABSTRACT**

Primary cutaneous mucinous carcinoma (PCMC) is rare neoplasm. It is malignant neoplasm arising from sweat glands. Study present a first case from our institute reported case of PCMC involving penis. Worldwide incidence is 0.07% at present.

Keywords: PCMC, Penis

## INTRODUCTION

Primary cutaneous mucinous carcinoma (PCMC) is a rare neoplasm. It is a malignant neoplasm arising from sweat gland. Primary cutaneous mucinous carcinoma is rare in Penis. First PCMC described by Lennox and colleagues in 1952. PCMC lesions are mostly seen in head, neck, breast, GIT, lung, ovary and prostate. We present in our institute first case of PCMC involving the Penis.

## **CASE REPORT**

75/male patient presented to our surgical clinic with chronic penile lesions that had been previously treated outside but didn't get relieved. Initially it was approx. 2mm, soft round nodule. At present, it was approx. 5mm with indurated margins the patient was otherwise healthy but did have history of circumcision in childhood no documentation at present. Patient also give history of pain in abdomen in light of this patient underwent OGDSCOPY in 2008 but there was no findings on OGDSCOPY. There was no history of any STD, viral infection or trauma to the penis. In 2014 we excised this penile lesion. Grossly the appearance of the lesion was a chronic non-healing ulcer or and scar. On P/R grade I prostatomegaly was present. Wedge biopsy of ulcer

showed mucin secreting adenocarcinoma of penis. Patient also underwent other investigations to rule out exact cause of metastasis. HRCT thorax, CT abdomen and pelvis, as well as USG scrotum and abdomen and pelvis. These investigations were negative for metastatic disease. Hematology and hepatic profiles were within normal limits. Surgical pathology confirms a central pale tan nodule measuring 2.4x1.4x0.5cm. Microscopic evaluation demonstrated positive lateral and deep margins with histology typical of mucinous carcinoma. Immunohistochemistry analysis demonstrated ereceptor positive supports diagnosis of PCMC.



Figure 1: Total penectomy with 1cm margin.

Patient was undergoing surgery and discharged and advice for follow up every 6 monthly and once yearly with CT abdomen and pelvis for 3 years' surgery was uneventful. At present, there was no sign of any complication.

Patient underwent total penectomy with 1cm margin and perineal urethrostomy was done followed by Foleys catheterization.

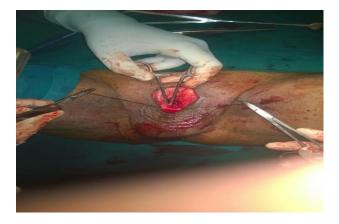


Figure 2: Wound after excision of penis.



Figure 3: Perineal urethra.

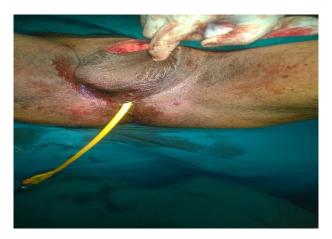


Figure 4: Perineal urethrostomy.



Figure 5: Lesion site in excised specimen.

### DISCUSSION

Primary cutenous mucinous carcinoma (PCMC) is a rare Neoplasm. It is a malignant Neoplasm arising from sweat gland. The incidence of PCMC is about 0.07 per million. <sup>1-3</sup> Clinically patients usually present with a small, solitary asymptomatic papules or nodules that have been present for years, clinical appearance may vary from patient to patient. <sup>2,4-6</sup> Tumor rarely metastasize but the local recorrence is high. <sup>4</sup> PCMC is typically described as nests of epithelial cells floating in lakes. PAS positive mucin. <sup>3</sup>

Tumors are generally well circumscribed with small islands or tubules of epithelial cells floating in large pools of mucin. The mucin is separated by thin fibrocollagenous septa and is positively stained with periodic acid-Schiff (PAS), mucicarmine, alcian blue at pH 2.5, and colloidal iron. The mucin has been characterized as sialomucin and is PAS positive both with and without the presence of diastase or hyaluronidase. It is, however, sialidase-labile. Cells are small, cuboidal and vacuolated with eosinophilic cytoplasm. Mitoses and cellular pleomorphisms are rare. 6.7

Final diagnosis, therefore, can only be made through clinical investigation to exclude a primary tumour elsewhere.<sup>4</sup> Recommended treatment includes wide local excision.<sup>2,3,9,12</sup> and addition of regional node dissection, and the use of adjuvant hormone therapy with antiestrogenic agents, such as tamoxifen, to reduce the risk of recurrence.<sup>4,10</sup>

Several reports of successful treatment using Mohs micrographic surgery have been described. One successfully treated case used low-molecular weight immunostaining in the Mohs's sections. 11 Other treatments, such as chemotherapy and radiation, generally are not employed in the management of these tumors. 10 Patients should be counseled about the importance of frequent follow-up, for evaluation for local tumor recurrence or development of regional lymphadenopathy. 7

The patient we describe is one of the few cases of primary mucinous carcinoma of the penis. The clinical appearance, the location, and the histologic findings are all consistent with mucinous carcinoma. Significantly, the patient underwent complete systemic evaluation for other internal malignancies that may manifest as metastatic disease, but the work-up was negative

### **CONCLUSION**

PCMC is a rare malignant neoplasm with low propensity for metastasis. PCMC most commonly involves the head, and we report the first case in our college involving the penis. While characteristic immunohistochemical features aid in the diagnosis. PCMC can be kept as a differential diagnosis in case of ulcer over penis. Surgical excision is the standard for treatment and patients should be followed to monitor for recurrence.

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