Pseudoepitheliomatous keratotic and micaceous balanitis of Civatte

Sudip Das, Loknath Ghoshal

Department of Dermatology, Venereology and Leprology, NRS Medical College, Kolkata, West Bengal, India

ABSTRACT

Pseudoepitheliomatous, keratotic, and micaceous balanitis is a rare condition characterized by verrucous excrescences with scaling. Most patients are over the age of 50 and frequently have been circumcised for phimosis in adult life. We present here a case of 35-year-old male patient with long standing phimosis presenting with a firm whitish plaque on the glans penis. The crusts were micaceous in nature. Histopathologically, there was pseudoepitheliomatous hyperplasia with acanthosis and no cellular atypia. The condition was explained to the patient and treatment options discussed. The patient was started on topical 5-fluorouracil cream on a daily basis as he did not express consent for operative intervention.

Key words: Glans penis, pseudoepitheliomatous, verrucous

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Address for correspondence:
Dr. Sudip Das,
Department of Dermatology,
NRS Medical College,
138, AJC Bose Road,
Kolkata - 700 014,
West Bengal, India.
E-mail: drsudip1966@yahoo.co.in

INTRODUCTION

Growths on the penis invariably cause alarm both on the part of the part of the patient as well as the treating physician and need to be biopsied and treated accordingly. Certain rare tumors initially show benign histology or later show either a low-grade or delayed malignant growth potential. Three clinical entities fall into this category. Those are penile horn, giant condyloma (Buschke-Lowenstein tumor) and an extremely rare penile growth pseudoepitheliomatous, keratotic, and micaceous balanitis (PEKMB).[1] We report here a patient with PEKMB who, having declined definitive surgery was managed with topical therapy and lifelong follow-up.

CASE REPORT

A 35-year-old unmarried man presented with a thick scaly plaque on the glans penis present for the past one and half years [Figure 1]. The lesion initially was small and progressed very slowly and to attain the current size. He had undergone circumcision 3 years back due to pre-existing phimosis. There was no history suggestive of diabetes, sexual exposure, and urethral discharge. He was treated with antiseptic applications and herbal medicines on various occasions.

Examination revealed a thick scaly plaque on the glans penis measuring about 1.5 cm by 1.5 cm. There was no tenderness or induration. The rest of the genitalia were normal. There was no inguinal lymphadenopathy. Examination of the rest of the body, mucous membranes, hair and nails revealed no abnormality. Systemic examination was also normal.

Results of blood examination including blood sugar, Hepatitis B surface antigen, Venereal Disease Research Laboratory (VDRL) test and human immunodeficiency virus were normal. Incisional biopsy was done and sent for histopathological examination. The slide [Figure 2] revealed pseudoepitheliomatous hyperplasia, acanthosis, and elongation of rete ridges. There was a nonspecific dermal inflammatory cell infiltrate consisting mainly of lymphocytes with few eosinophils. However, there was no cytological atypia, koilocytes or evidence of malignancy.

Based on the clinical features and histology, the diagnosis of PEKMB of Civatte was made. The condition was explained to the patient and treatment options discussed. The patient declined definitive surgery and was started on topical 5-fluorouracil cream on a daily basis and advised life-long follow-up.

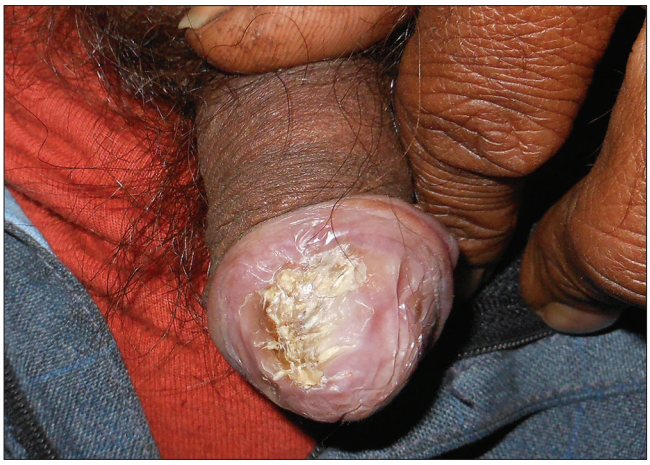

Figure 1: The thick scaly plaque on the glans penis

DISCUSSION

PEKMB was described by Lortat-Jacob and Civatte in 1966.[2] The lesions occur on the glans penis and are verrucous excrescences with scaling. Ulcerations, cracking, and fissuring on the surface of the glans are frequently present. The keratotic scale is usually micaceous and resembles psoriasis or may be nail like which could be easily peeled off.[3]

Most patients are over the age of 50 and frequently have been circumcised for phimosis in adult life. Histologically, there is marked hyperkeratosis and parakeratosis, as well as pseudoepitheliomatous hyperplasia. Acanthotic masses give rise to a crater-like configuration.

The differential diagnosis includes squamous cell carcinoma (SCC), verrucous carcinoma, keratoacanthoma, giant condyloma, penile horn, and erythroplasia of Queyrat.[1] Human papilloma virus has not been detected. The exact etiology is not known. Originally, the lesion was thought to be benign or of limited malignant potential.[4] The pathogenesis of PEKMB occurs in four stages: (a) initial plaque stage, (b) late tumor stage, (c) verrucous carcinoma, and (d) transformation to SCC and invasion.[5] The treatment is usually surgical and might include Mohs microsurgery. Topical 5-FU has been effective, but the hyperkeratotic scale may make penetration suboptimal. If topical chemotherapy is utilized, post-treatment biopsies are recommended.

Out of the 15 cases described in the English literature, 6 progressed to verrucous carcinoma, 4 cases developed SCC, out of which 2 had progressed from verrucous carcinoma to invasive SCC.[6]

Our patient had presented at a relatively young age, and as in other reports, had a previously existing phimosis problem. He was asymptomatic but was anxious about the cosmetic disfigurement and potential for developing cancer. The histology was consistent, though not specific. There was however no evidence of any malignancy. We are also of the same opinion as Kumar *et al*.,[7] that chronic irritation and inflammation of long standing phimosis predisposes to the condition. However, larger studies are required to corroborate this observation.

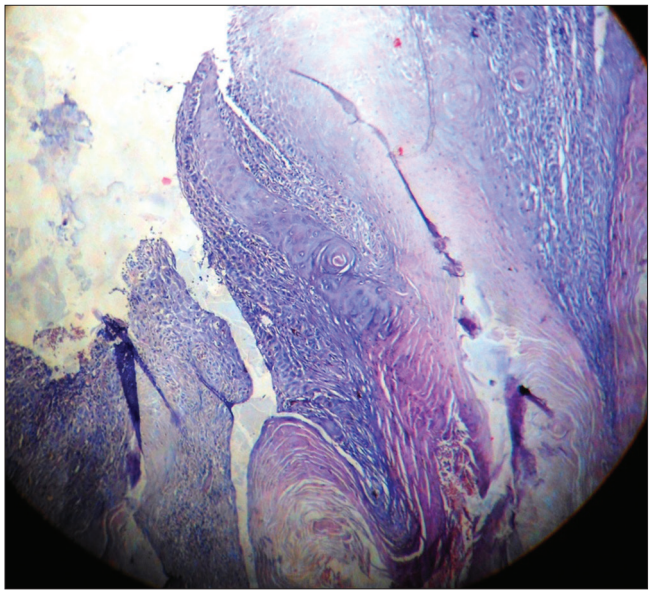

Figure 2: Histopathology section showing pseudoepitheliomatous hyperplasia, acanthosis, and elongation of rete ridges. A non-specific dermal inflammatory cell infiltrate consisting mainly of lymphocytes with few eosinophils is seen. There is no cytological atypia or koilocytes

To the best of our knowledge, only 15 cases have been described in the literature until date throughout the world, with very few reports from the Indian subcontinent. This case is being reported not only for its rarity, but also for emphasizing the need for early diagnosis and long-term follow-up.

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