PSEUDOEPITHELIOMATOUS KERATOTIC AND MICACEOUS BALANITIS – A RARE CASE

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ABSTRACT: An elderly uncircumcised male presented with thick scaly lesions over his glans penis of one year duration. Histology showed acanthosis, papillomatosis, and elongated rete ridges into the dermis suggestive of pseudoepitheliomatous, keratotic, and micaceous balanitis. Topical therapy was advised and followed up closely for malignant transformation.

KEYWORDS: Non-venereal genital dermatosis, keratotic and micaceous balanitis, pseudoepitheliomatous

INTRODUCTION: Pseudoepitheliomatous, keratotic, and micaceous balanitis (PEKMB) is rare acquired penile non-venereal dermatoses involving the glans, occurs in older men who undergo circumcision later in their life. PEKMB was first described by Lortat-Jacob and Civatte[1]. This disorder is considered as pseudo malignant, premalignant, or as a low grade squamous cell carcinoma[2]. PEKMB initially show benign histology or later may show either a low grade or delayed malignant growth potential[3]. The term "micaceous" refers to the white, scaly appearance of the lesions. The disease tends to progress slowly and recur locally.

CASE REPORT: A 66year man presented with thick, scaly lesions over the glans penis of 1 year duration [Fig 1, 2]. Insidious in onset. Itching rarely present, Occasional pain during erection and sexual intercourse. No difficulty in micturition. No history of fever, joint pains, pain or redness in the eyes and oral ulcers. Patient was anxious and concerned. Past history of treatment taken under general practitioners with topical antifungals and steroids on and off with no improvement. He had monogamous relationship with his spouse. He denied extra marital and pre martial contact. No history of previous venereal diseases.

On clinical examination, dry, rough, greyish yellow to grey hyperkeratotic, firm, scaly, adherent well demarcated plaques covering the glans penis. No induration felt underneath. Mica like scales with free edges, fissures were noted. Some scales could be peeled off with difficulty without bleeding. He is able to retract and re-retract the prepuce effortlessly. Penile shaft, scrotum and inguinal regions were normal. Other mucosa spared. No local and generalized lymphadenopathy. Joints and musculoskeletal system were within normal limits. General and systemic examinations were normal.

Routine blood and urine investigations revealed no abnormality. VDRL, TPHA, HBsAg, HCV, HIV were non reactive. Histopathological examination revealed confluent hyperkeratosis, parakeratosis, irregular acanthosis, papillomatosis, elongated retes. Dermis showed a sparse lymphocytic infiltrate. No evidence of mitotic figures. We made a diagnosis of PEMKB based on classical and corroboratory histopathology. 5% 5 Fluorouracil cream for topical use at bedtime was

prescribed and he is being followed up for cancerous changes. No drastic improvement was seen till date.

DISCUSSION: PEKMB was first named and described by Lortat-Jacob & Civatte in 1961 and by Bart & Kopf later[4, 15]. Only a few cases have been reported in India. This rare condition is mostly reported in elderly males. The keratotic scales is usually micaceous and resembles psoriasis[1.] Most patients are above 50 years of age and are circumcised later in life, but also reported in younger agegroup[5,9]. This mica like scales contains keratin which gets dissolved in 10% potassium hydroxide solution[6]. Disease progression may lead to phimosis. Differential diagnosis of this disease entity include moniliasis, wart, psoriasis penile horn, circinate balanitis, erythroplasia of Queyrat, squamous cell epithelioma and verrucous carcinoma[10,11,12].

It is primarily a benign entity, it is capable of invasiveness. Bart and Kopf considered it to be in intermediate stage between benign hyperplasia and squamous cell carcinoma[4]. However, the histological spectrum can range from hypertrophic-hyperplastic penile dystrophy to verrucous carcinoma. A new name, micaceous and verrucous malignant balanitis has been suggested for this condition[7]. Fibro sarcoma has been reported developing in a same patient[16]. Etiology is unclear. Despite search for a viral agent, Human Papilloma Virus (HPV) has not been demonstrated and its role in pathogenesis or its transformation to verrucous carcinoma has been proved[8]. There is a report from Korea using a broad-spectrum PCR technique and restriction fragment mass polymorphism HPV 81 was identified from the hyper plastic epidermis of PEKMB[14].

The treatment of PEKMB should be conservative when there is no histological evidence of malignancy[3]. All such patients should be followed up. Treatment choices include potent topical steroids, topical 5% 5-flurouracil cream[1, 2], cryotherapy, radiotherapy and shaving biopsy plus electro coagulation. Relapses are not uncommon with these treatments[9]. Subcutaneous interferon-α is also considered as effective[13]. In a study, triamcinolone acetonide cream (0.1%), 5-fluorouracil (1%), and podophyllin application (20%) were tried one after the other without any benefit[5]. When there is cellular atypicality, excision yielded excellent results[7]. Treatment is usually surgical removal by Mohs microsurgery to achieve cosmetic and functional benefits. When frank malignancy is observed, excision with wide margin is the rule[3].

In our case, histology was benign; hence we have advised topical 5 % 5 fluorouracil. Debulking the keratotic layer (e.g. by paring) prior to topical treatment with 5-FU is found to be more effective in a study[9]. PEKMB in an uncircumcised as in our case is not so common[17]. We present this report to highlight the importance of long-term follow-up for development of invasive cancer later. Novel and effective topical therapy will be advantageous to older males who defer or unfit to undergo surgical therapy.

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Fig1. Yellowish hyperkeratotic plaques over glans penis

Fig 2.Well defined scaly plaques on the glans

CASE REPORT

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