



ERYTHROPLASIA OF QUEYRAT- A CASE REPORT

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<p>Article Info <i>Received 15/09/2015</i> <i>Revised 27/10/2015</i> <i>Accepted 12/11/2015</i></p> <p>Key words: Erythroplasia of Queyrat, Carcinoma in situ.</p>	<p>ABSTRACT Erythroplasia of Queyrat is the term often used for carcinoma in situ located on the glans penis. We report a case of a 50 year old male, who came with re-occurring verrucous growth (post excision biopsy) on the glans penis of 2 months duration. On re-evaluation, Histopathological examination revealed features typical of Erythroplasia of Queyrat.</p>
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INTRODUCTION

Erythroplasia of Queyrat (EQ), Bowenoid papulosis (BP), Bowen's disease of penis (BDP) represent penile interstitial neoplasias (PIN) analogous to vulvar, anal & cervical interstitial neoplasias (VIN, AIN and CIN). Bowen's disease at other sites represents squamous cell carcinoma in situ. Erythroplasia of Queyrat represents Bowen's disease on the genital mucosa.

CASE REPORT

A 50 year old male, chronic smoker and alcoholic for past 30 years was referred to our OPD from a general surgeon with complaints of re-occurring growth on the glans penis of 2 months duration. Patient underwent excision biopsy of the similar tumor at the same site 2 months back, following, which it reappeared. There is history of pain & no history suggestive of ulceration or discharge. No history of difficulty in voiding. There is past surgical history of circumcision done for phimosis, 5 years back.

On examination, general condition and vitals were stable. Local examination revealed a 1.5 × 1.5 cm, ill-defined verrucous nodule on the dorso-lateral surface of the circumcised glans penis. On palpation it was tender, hard and with restricted mobility. The base appeared to be

infiltrated. The surrounding mucosa showed patches of post inflammatory pigmentation and hypopigmentation. The urethral meatus and the shaft of penis appeared normal. No inguinal lymphadenopathy was found. Systemic examination was normal.

Basic blood and urine investigation were within normal limits. Histopathological examination revealed hyperkeratosis, marked acanthosis with disordered arrangement of the stratum malpighii, resulting in a 'windblown appearance'. A few keratinocytes appeared dyskeratotic with some suprabasal widened spaces. Thus the diagnosis of Bowen's disease of the penis or Erythroplasia of Queyrat was made and the patient was referred to the surgeons for further surgical management.

DISCUSSION

Synonyms: Bowen's disease of the glans penis, Carcinoma in situ.

Erythroplasia of Queyrat is clinically and pathologically similar to Bowen's disease. The term Erythroplasia of Queyrat is still alive because of its introduction a year ahead of the discovery of Bowen's disease. [1]

The Bowen's disease of the glans penis or Erythroplasia is commonly seen in uncircumcised men. Etiology includes



local carcinogenic factors such as smegma, phimosis, trauma, inflammation, friction, heat, ultraviolet light, maceration, lichen sclerosus, poor hygiene and smoking. [2]. It is been proposed that HPV-8 & HPV-16 are related to EQ. [3]. In smokers HPV-16 & 18 are frequently reported. EQ clinically presents as an asymptomatic, bright red, sharply demarcated, shiny, minimally infiltrated plaque most often over the glans penis & less commonly on the inner surface of the prepuce or in the coronal sulcus. [4]. In time, the plaque on the glans may progress to involve the prepuce skin. Similar lesions have been described on the vulva. The more induration of plaque is suggestive of invasive carcinoma. Progression of EQ to an invasive squamous cell carcinoma has been reported in 30% of patients & EQ has a got a greater tendency to

invade & metastasize than Bowen's disease of the skin. [5]. Progression is mostly seen in immunocompromised and patients with perianal diseases. [6].

Histology reveals a thickened epidermis with disorganized and a few nuclear atypia of the keratinocytes. The keratinocytes are large with hyperchromatic nucleus and numerous mitotic figures. Numerous dyskeratotic cells can be seen. In most of the cases, the cells in the basal layer without getting enlarged form a palisade of small cells the so-called eyeliner sign. The surface may be eroded or covered with a parakeratotic crust. A dense band of lymphocytes is frequently present in the papillary dermis. The entire biopsy specimen should be screened for a breach in the basal layer before the diagnosis of EQ is made.

Figure 1. Clinical picture showing 1.5 × 1.5 cm, ill-defined verrucous nodule on the dorso-lateral surface of the circumcised glans penis

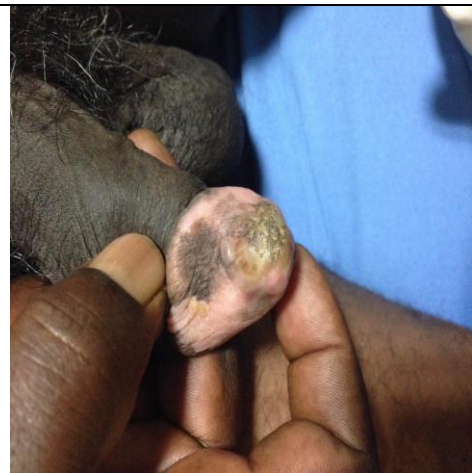


Figure 2. Histological picture (low power- 100 X) showing hyperkeratosis, marked acanthosis with disordered arrangement of the stratum malpighii

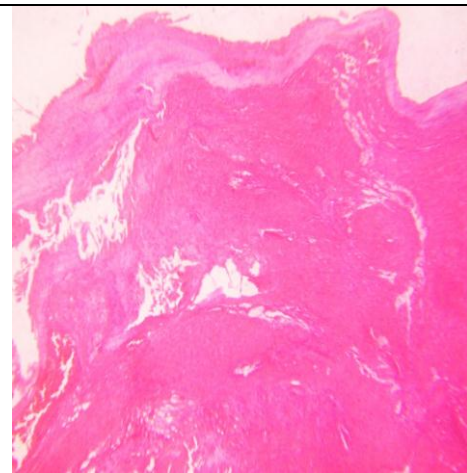
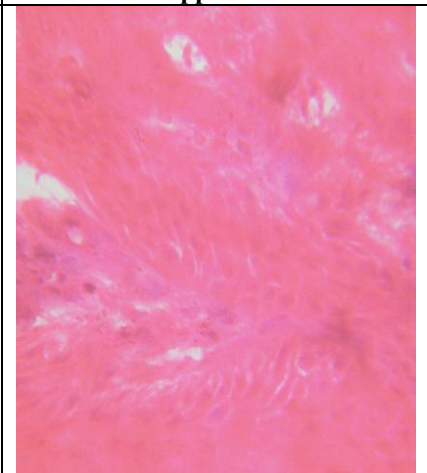


Figure 3. Histological picture (High power- 400 X), showing a complete disorder of cells, throughout the epidermis - 'windblown' appearance



CONCLUSION

Differential diagnoses include psoriasis, erosive lichen planus, lichen sclerosus & Zoon's balanitis. Topical corticosteroids may give some temporary improvement. Other agents such as topical 5-fluorouracil, cryotherapy, CO₂ laser, radiotherapy, Mohs' micrographic surgery, electrodesiccation & photodynamic therapy are useful. Topical cidofovir & imiquimod has been found to be useful. [7].

Definitive treatment is excision of lesion. If there is invasion it should be treated like a squamous cell carcinoma. Excision should be performed in case of thick or polypoidal lesions.

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CONFLICT OF INTEREST:

The authors declare that they have no conflict of interest.

STATEMENT OF HUMAN AND ANIMAL RIGHTS

All procedures performed in human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.



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