

## Posthectomy Approach of Erythroplasia of Queyrat: A Case-Report

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### ABSTRACT

Erythroplasia of Queyrat stands for a precancerous lesion, a carcinoma in situ evolving through an epidermoid carcinoma in the absence of an appropriate management.

We report a case of 66-year-old uncircumcised Caucasian patient who was suffering from a lesion of erythroplasia of Queyrat located at the penis and treated by posthectomy after failure of a cream-based chemotherapy.

The diagnosis of Erythroplasia of Queyrat is histological. In our patient, the race and the absence of circumcision allowed us to conjure up the diagnosis. Surgical treatment seems to be the referential approach in the management of this intra-epithelial neoplasia.

**Keywords:** Erythroplasia of Queyrat; Posthectomy; Uncircumcised

### INTRODUCTION

Described in 1911 upon the glans of the penis by Auguste Queyrat, erythroplasia of Queyrat stands for a precancerous lesion, a carcinoma in situ evolving through an epidermoid carcinoma in the absence of an appropriate management. The diagnosis relies on histological examination and the treatment is based on cream application chemotherapy and surgery. HPV infections, lack of local hygiene and uncircumcision are highlighted to be etiological factors. We report a case of erythroplasia of Queyrat affecting involving the penis and treated with posthectomy.

### CASE REPORT

It was about a 66-year-old uncircumcised caucasian patient, who presented with a non-itching erythematous lesion of the glans evolving 3 weeks ago. The patient didn't report lower urinary tract symptoms. The clinical examination outlined a surrounded, plane and erythematous lesion measuring 2 cm of diameter (Figure 1). A biopsy was performed upon the lesion

and revealed a suggestive aspect of erythroplasia of Queyrat. He underwent a 2-month-period chemotherapy based on 5FU (Efudix) local application cream. The outcome of the chemotherapy was featured by the regression of the redness. However, we could note a squamous erosion left (Figure 2), indicating a posthectomy approach. Surgery was carried out 3 months after the beginning of symptoms (Figure 3). The histological approach of the specimen had confirmed the biopsy findings (Figure 4). At 19 months follow-up there was no disease recurrence.



Figure 1: Clinical aspect of the lesion before applying 5 FU cream.

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Figure 2: Clinical aspect of the lesion after using 5 FU.



Figure 3: (A) Postectomy, and (B) After healing.

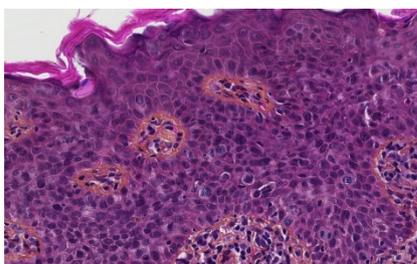


Figure 4: Histological aspect of the Erythroplasia of Queyrat at 40 growths.

## DISCUSSION

Erythroplasia of Queyrat occurs on advanced age range from 50 to 60 years of old and evolves in epidermoid carcinoma in 33% of cases [1]. The underlying risk factors are represented by, among others, uncircumcision, HPV infection and a lack of local hygiene. Among uncircumcised men, a persistent irritation of the penile mucosa by the smegma, due to the bacterial effects on desquamous cells would have a carcinogenesis effect which is increased by the presence of phimosis [2]. HPV is the main involved infectious risk factor in the etiopathogenesis of penile cancer, namely for the stereotypes 16 and 18 [3]. HPV infection prevalence during penile cancer range from 15 to 70% in the literature [3]. Despite the protective role of neonatal circumcision reported in the literature, some authors don't find necessary to globalize this point to prevent the occurrence of penile cancer or genital infections.

It isn't an anodine procedure and an optimal genital and sexual hygiene is mostly enough to prevent the occurrence of penile cancer [4]. It can be multiple lesions. However, mostly, that's a unique lesion usually sitting on the foreskin 30%. It occurs more commonly on caucasian 90% than other races [5]. The diagnosis relies on the biopsy of the reddish lesion showing an extension of epithelial ridges, acanthosis, hypergranulosis, hyperkeratosis, parakeratosis and some apoptotic bodies are

possible, but unsteady [6] no imaging extension assessment is indicated [7]. A biological test for a possibly associated sexually transmitted infection is indicated, including at least HIV, hepatitis B and syphilis serology and PCR testing for Chlamydia trachomatis in the first urine stream, sometimes extended to HCV serology and anal and oropharyngeal C. trachomatis screening according to sexual behaviours [8]. Molecular biology HPV testing and typing for oncogenic HPV don't have neither prognostic nor therapeutic value.

Some authors observed a healing after a chemotherapy based on Imiquimod 5% or 5 FU topical cream [9,10], but the result related to this chemotherapy approach in the management of such precancerous lesions remains controversial. Besides topical chemotherapy, dynamic phototherapy (DPT) with aminolevulinic acid (ALA), laser and radiotherapy can lend alternative support to the treatment [7]. The core therapy relies on surgical resection with an edge of 5 mm [11]. In our case, circumcision lent support a total resection of the lesion after an unremarkable outcome with 5 FU cream application. Thanks to the histological analysis of the excisional specimen, the surgery makes it possible to highlight any invasive area that may not have been identified on biopsy, which is observed in 20% of operated Bowen's diseases [12].

## CONCLUSION

Erythroplasia of Queyrat is an uncommon precancerous lesion of which the diagnosis is histological. In our patient, the race and the absence of circumcision allowed us to conjured up the diagnosis. Surgical treatment seems to be the referential approach in the management of this intra-epithelial neoplasia.

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