

Title: From Suspected Syphilis to Erythroplasia of Queyrat: Role of Biopsy and Carbon dioxide Laser in the Management

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Introduction

- ❖ Penile ulcers have varied etiologies, commonly infectious but occasionally malignant.
- ❖ Persistent ulcers despite adequate therapy necessitate histopathological evaluation.

Case History

- ❖ A 58 years old married male known diabetic and hypertensive referred in view of positive VDRL test with titres of 1:16 to dermatology OPD.
- ❖ Patient denied history of high risk sexual behaviour and spouse's VDRL was negative .
- ❖ During examination a single painless ulcer was seen just above the coronal sulcus on prepuce with Candidial balanoposthitis .
- ❖ Patient was diagnosed as primary syphilis with Candidial balanoposthitis.
- ❖ Patient was treated with 2 doses of Injection Benzathine penicillin and fluconazole 150 mg stat dose.
- ❖ Patient developed a fixed drug reaction after the second dose of benzathine penicillin , hence the third dose was not given. Oral azithromycin was given in multiple courses.
- ❖ After 3 months of treatment VDRL was non-reactive but ulcer was persistent and gradually increasing
- ❖ Histopathology confirmed the diagnosis of Erythroplasia of Queyrat
- ❖ The ulcer was ablated with carbon dioxide laser under local anaesthesia with complete healing of lesion without recurrence at 18 months follow up.

Conflict of interest- none

Cutaneous Examination



Maceration and white membrane on the prepuce with single indurated ulcer

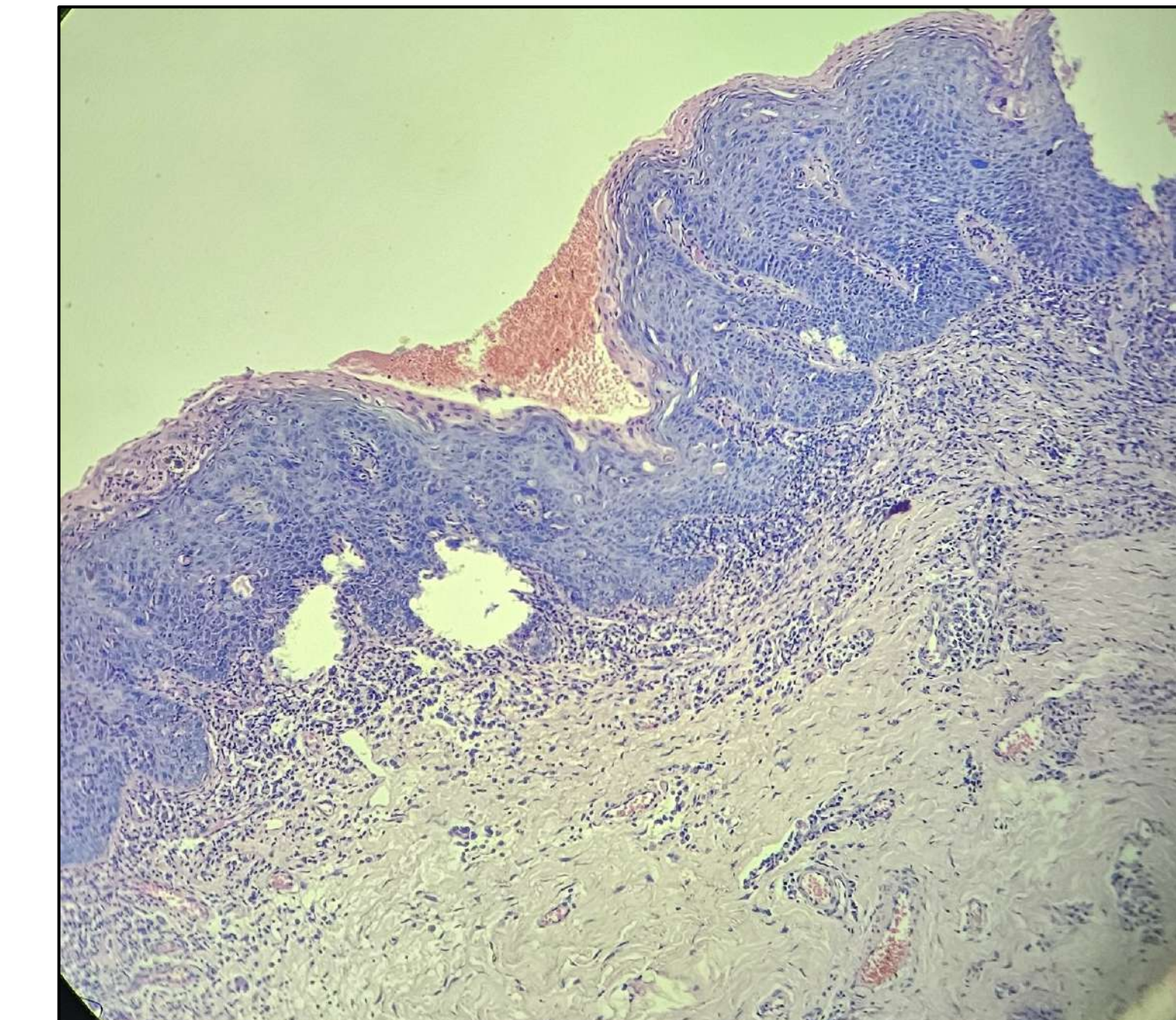


Resolution of balanoposthitis After treatment but persistence of ulcer after 2 doses of Benzathine penicillin

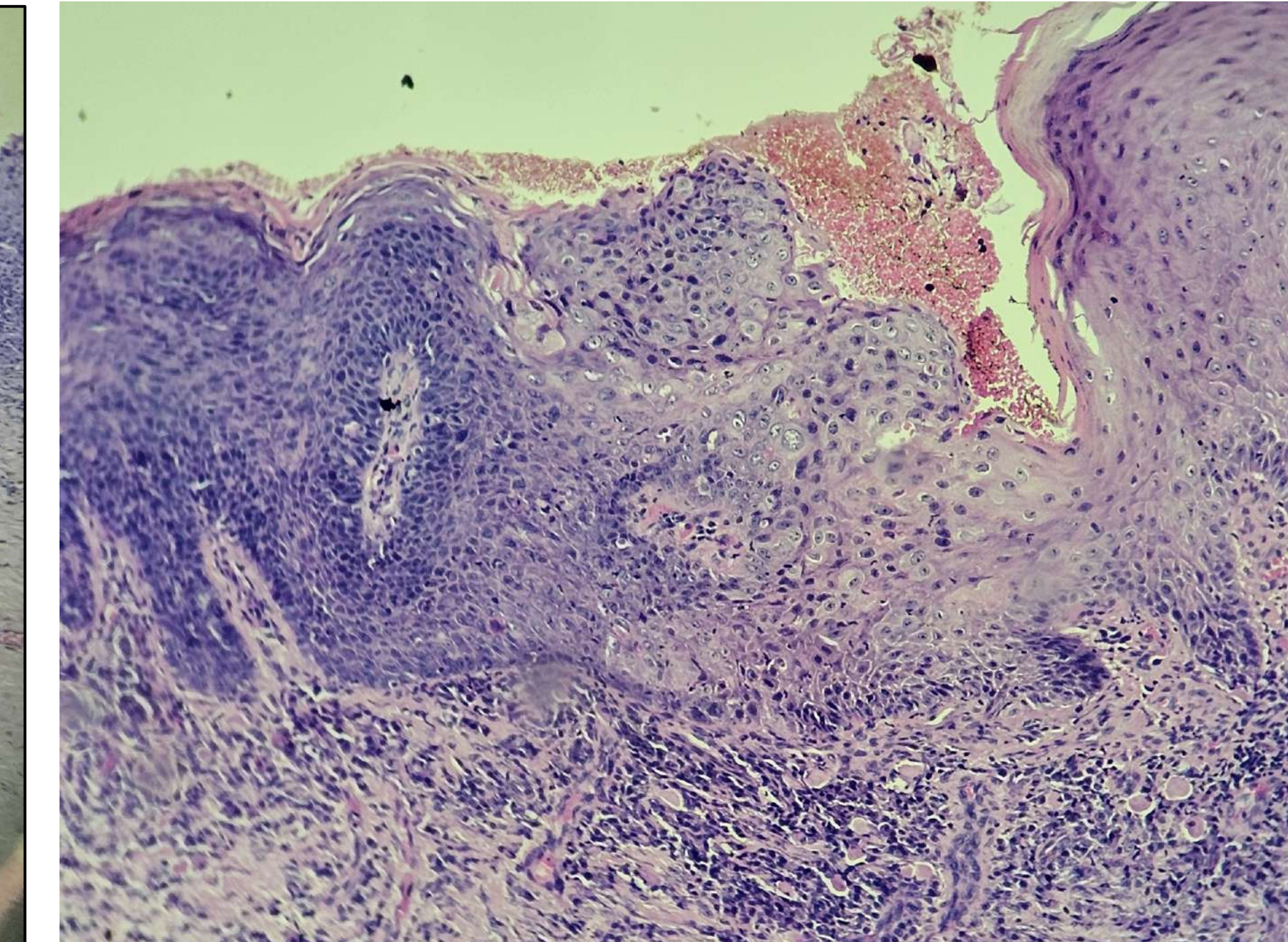
Conclusions

- ❖ Erythroplasia of Queyrat (EOQ) is a squamous cell carcinoma in situ most commonly located on the glans penis or prepuce.
- ❖ Accounts for roughly 10 % of all penile malignancies and may lead to invasive squamous cell carcinoma.
- ❖ Standard therapy: local excision, partial or total penectomy, cryotherapy, and topical cytotoxic agents.
- ❖ CO2 laser proved to be an effective therapeutic modality
- ❖ Our case also highlights the monitoring of treatment response and role of biopsy to look for presence of coexisting diseases in patients of syphilis

Histopathology



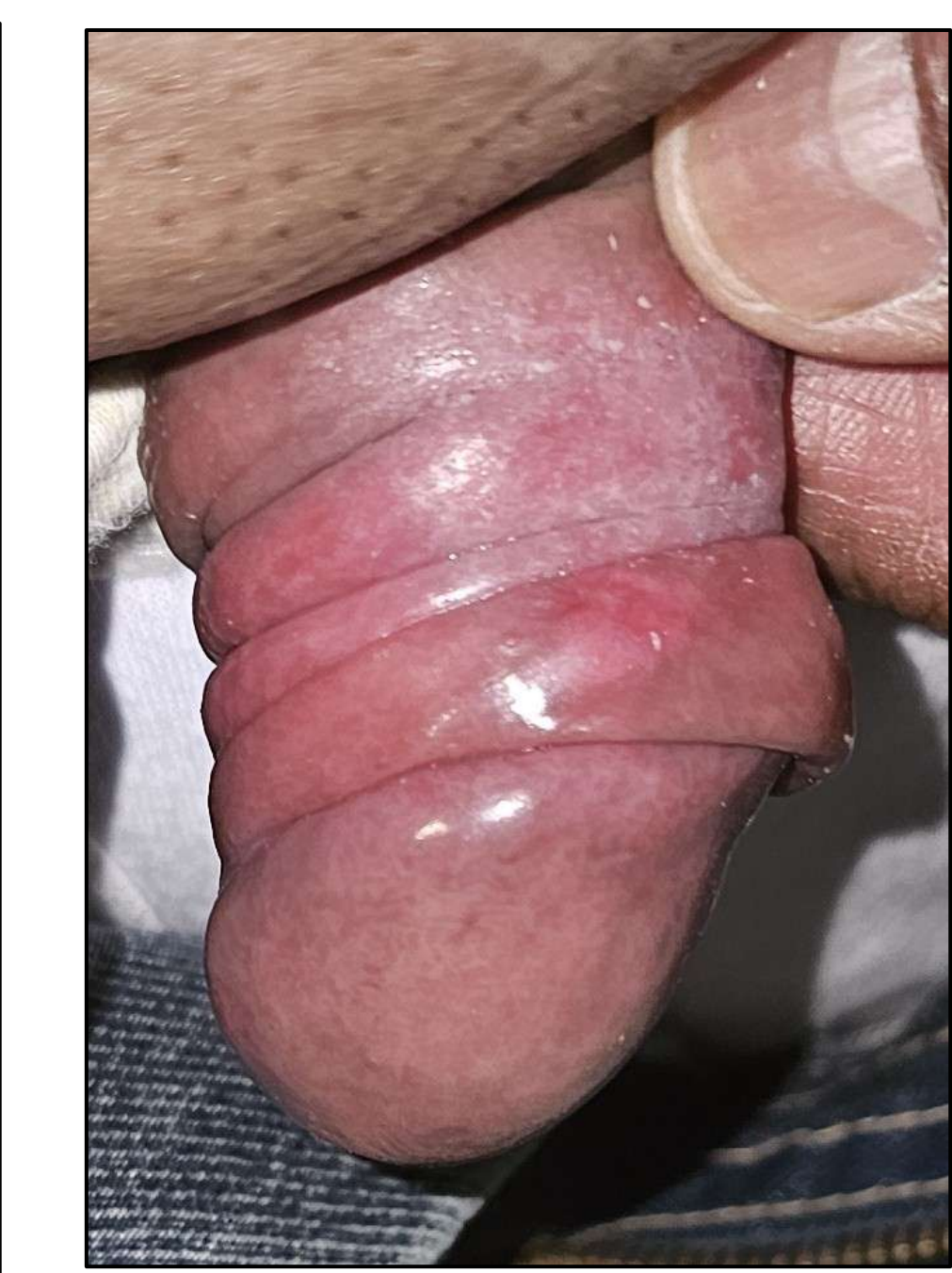
Full thickness dysplasia of epidermis with atypical keratinocytes .Dermis- moderately dense superficial and mid perivascular infiltrate of lymphocytes and numerous plasma cells



Treatment



After 3 weeks



After 6 months

Complete resolution of lesion after CO₂ laser ablation

References

- ❖ Greenbaum SS, Glogau R, Stegman SJ, Tromovitch TA. Carbon dioxide laser treatment of erythroplasia of Queyrat. J Dermatol Surg Oncol. 1989 Jul;15(7):747-50. doi: 10.1111/j.1524-4725.1989.tb03623.x. PMID: 2501369.