

Effective Chemotherapeutic Resolution of Squamous Cell Papilloma with 5FU

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ABSTRACT

Squamous cell papilloma is a benign mass of stratified squamous epithelium of conjunctiva. It can occur in both children and adults. We present a case of a 20-year-old male patient with recurrent conjunctival mass for the last 2 years. It was surgically removed six months back, but it recurred. Excisional biopsy revealed the Squamous cell papilloma of the conjunctiva. We prescribed 5 FU drops in QID dose for a week and then stopped for 3 weeks. Six such cycles were performed. Complete resolution was achieved at the end of the 6th cycle. No side effects or recurrence were reported even after 2 years of completion of management. The patient is being observed on routine follow-up visits.

Keywords: Papilloma, conjunctiva, 5 FU.

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INTRODUCTION

Squamous cell papilloma is a benign mass which arises from stratified squamous epithelium of the conjunctiva.¹ Although it can be seen at any age, the most common age of presentation is between 20 and 39 years.² However, they are larger and multiple in children and adolescents than in adults. Symptoms depend on the size and location of tumor. Most small lesions are asymptomatic. Large lesions cause foreign body sensations.³ It is commonly located in the inferior fornix, but may also be limbal, palpebral or arise from the caruncle.⁴ It may be unilateral, bilateral, solitary or multiple. Squamous cell papilloma has been found to be associated with Human Papilloma virus.⁵

Grossly, conjunctival papilloma appears as a greyish red fleshy, soft pedunculated mass with an irregular surface, appearing like cauliflower. There are various conservative and surgical methods of management of conjunctival papilloma including use

of topical antimetabolites like Mitomycin-C, 5 FU, topical interferon alpha-2b, cryotherapy and surgical excision.⁶ Recurrence rate has been noted to be 3 to 27% in various studies.⁷

5 FU is a pyrimidine analog. It blocks DNA and RNA synthesis by blocking thymidylate synthase. More side effects have been reported with 5FU than INF-a but it is better-tolerated and more cost effective. Side effects observed with 5 FU include, ocular pain, conjunctival hyperemia, eyelid edema, superficial keratitis, filamentary keratitis and may rarely cause superficial stromal melting. These side effects can easily be managed with treatment. It is compounded but does not require refrigeration. It has been used as an adjuvant in the management of glaucoma, vitreoretinal, and pterygium surgeries and OSSN.⁸

We present a case of conjunctival papilloma treated with 6 cycles of 5 FU without recurrence.

Case Presentation

A 20-year-old male patient presented to us in December 2022 with the complaint of fleshy growth in the inner corner of the left eye from last 2 years (Figure 1). It had been surgically removed 6 months back, but it had recurred. Excisional biopsy showed Hyperplastic squamous mucosa exhibiting papillae formation. Few goblet cells were identified within the

epithelium. A diagnosis of Squamous cell papilloma of the Conjunctiva was made. Topical chemotherapy with 5FU was started.

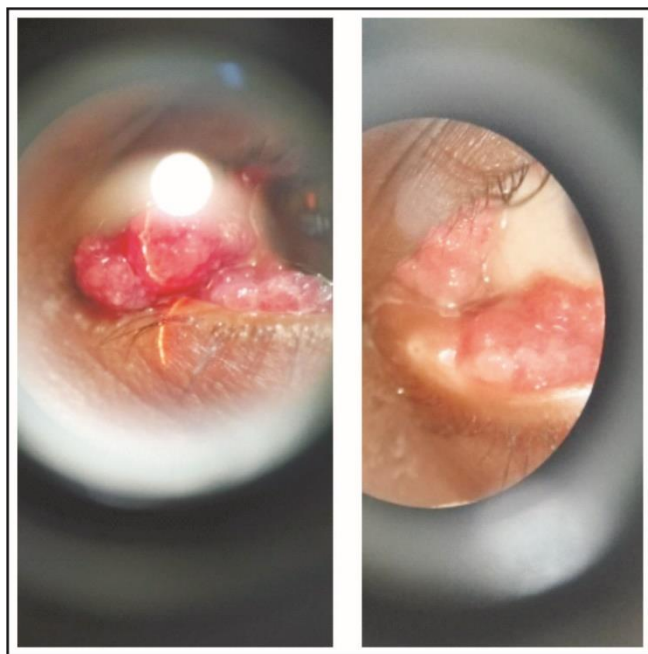


Figure 1: Left at the time of presentation
Right: 1 week after starting treatment with 5FU



Figure 2: Left 3 months after starting treatment
Middle: 6 months after starting treatment
Right: 2 years after completion of treatment

Drops were compounded in 1cc of lubricant from a lubricant bottle and 1cc of 5mg/ml 5FU was injected into the lubricant bottle. The patient was advised to instill it cyclically, QID for a week and then stop for 3 weeks. One week on and 3 weeks off cycles were suggested for a total of 6 cycles. Patient was maintained on regular follow-up visits, initially fortnightly and later monthly to observe any possible

side effects. Significant reduction in size and congestion was observed even after the first week of starting treatment (Figure 2). The patient was kept on regular follow-up visits for 2 years. Progressive decrease in size was observed (Figure 2-4). At the end of 2 years the size remained the same (Figure 5). The patient was advised to visit the clinic if any recurrence was observed. No side effects were seen during the due course of time.

DISCUSSION

Various chemotherapeutic and immunotherapeutic options have been tried after surgery to reduce recurrence of Conjunctival squamous papilloma. These are Cryotherapy, Interferon alpha-2b (INF), MMC, 5 FU, Cimetidine, Pattern scanning laser photocoagulation and Photodynamic therapy.⁵

Recurrences have been seen after the use of INF alpha 2b. The drug is also expensive, reducing compliance. On the other hand, side effects with MMC have been found to be more than with INF and it also needs to be refrigerated. Although 5 FU has corneal and conjunctival side effects, but it is well-tolerated. This drug requires compounding but no refrigeration.

There are few reports of treatment of squamous cell papilloma with 5 FU. Two cases of recurrent conjunctival papilloma treated with topical 1% 5-FU showed no clinical improvement and developed significant ocular side effects. Adverse outcomes included corneal and conjunctival erosions, and ectropion, leading to discontinuation of therapy.¹⁰ Another case was reported by Theotoka in which recurrence occurred after treatment.⁵ In our case no side effects or recurrence was reported with 5FU even 2 years after completion of treatment with 5 FU. The patient is still under vigilant observation.

CONCLUSION

Topical 5-fluorouracil (5-FU) administered in intermittent cycles may be an effective and well-tolerated adjuvant therapy for recurrent conjunctival squamous cell papilloma, with sustained resolution and no recurrence observed over a two-year follow-up.

Patient's Consent: Researchers followed the guide lines set forth in the Declaration of Helsinki.

Conflict of Interest: Authors declared no conflict of interest.

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Authors Designation and Contribution

Nazia Qidwai; Assistant Professor: *Concepts, Design, Literature Search, Data Acquisition, Manuscript Preparation, Manuscript Editing, Manuscript Review.*

