

## Special Article - Conjunctivitis : Clinical Cases and Images

# Adjunctive Treatment of Conjunctival Squamous Papillomata with Intralesional Bleomycin

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## Abstract

To present a case of our recent experience with intralesional bleomycin (IBI) for the adjunctive treatment of diffuse squamous papillomata. A young girl with diffuse squamous papillomata underwent shave excision of the larger tumours and IBI was injected into the residual bases of these lesions as well as into smaller lesions that were not excised. Two weeks post-surgery all lesions had resolved with little evidence of scarring. Six weeks post-surgery no recurrence had occurred. Bleomycin acts predominantly on vascular endothelium causing sclerosis. We propose that IBI could be considered in the adjunctive treatment of diffuse squamous papillomata.

**Keywords:** Squamous papillomata; Intralesional bleomycin

## Case Presentation

We report on a case of a 4 year old girl that presented with a three week history of rapidly growing conjunctival masses of the left eye. She was HIV exposed at birth but confirmed HIV negative with ELISA at the time of examination. Vision was 20/20 in both eyes. Examination of the left eye revealed multiple sessile pedunculated masses involving the medial canthal area as well as the superior and inferior fornixes. An attempt was made to treat her with oral cimetidine, but compliance was poor and on follow-up a week later surgery was booked. At the time of surgery all the larger masses were excised (shave excisions), and bleomycin (a solution consisting of 1 international unit of bleomycin per millilitre saline together with 2% lignocaine in a ratio of 4:1) was injected into the bases of the excised lesions as well as intralesionally into smaller lesions. Histopathological examination found squamous papillomata with moderate atypia. On follow-up two weeks post-surgery, all the lesions had resolved, with very little evidence of scarring. On six week follow-up no recurrence was noted.



**Figure 1:** Pre-operative appearance of diffuse conjunctival squamous papillomata.



**Figure 2:** Appearance of the same eye as in figure 1, 2 weeks post-surgery and intralesional bleomycin injection.

## Discussion

Many treatment modalities including topical interferon alfa-2b [1], oral cimetidine [2] and mitomycin C [3] have been used with success in the treatment of conjunctival papillomata (Figure 1). Bleomycin has been proposed as a therapeutic modality in the treatment of various eyelid, periocular, conjunctival and orbital tumours [4]. Bleomycin is isolated from the soil fungus *Streptomyces verticillus* and has antiangiogenic, antibacterial and antineoplastic properties (Figure 2) [5]. The main effect of bleomycin is sclerosis of vascular endothelium. We believe that bleomycin was effective in this case due to the vascular nature of the squamous papillomata. More research will shed more light on the uses of bleomycin, and we propose that it could be considered as an adjunctive treatment of diffuse conjunctival papillomata where complete resection is not possible.

## References

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