

Topical Mitomycin C For The Treatment Of Conjunctival Carcinoma In Situ

Dr.TEBAY NADAA

ophthalmology resident , ophthalmology department B, specialtyhospital, CHU Ibn Sina, Rabat, Morocco

Dr.KRICHENE MOHAMED AMINE

ophthalmology resident , ophthalmology department B, specialtyhospital, CHU Ibn Sina, Rabat, Morocco

Dr.HAZIL ZAHIRA

ophthalmology resident , ophthalmology department B, specialtyhospital, CHU Ibn Sina, Rabat , Morocco

Pr.AKANNOUR YOUNES

professor ,ophthalmology department B, specialtyhospital, CHU Ibn Sina, Rabat, Morocco

Pr.SERGHINI LOUAI

Professor ,ophthalmology department B, specialtyhospital, CHU Ibn Sina, Rabat, Morocco

Pr.ABDELLAH ELHASSAN

Head of the department, ophthalmology department B, specialtyhospital, CHU Ibn Sina, Rabat, Morocco

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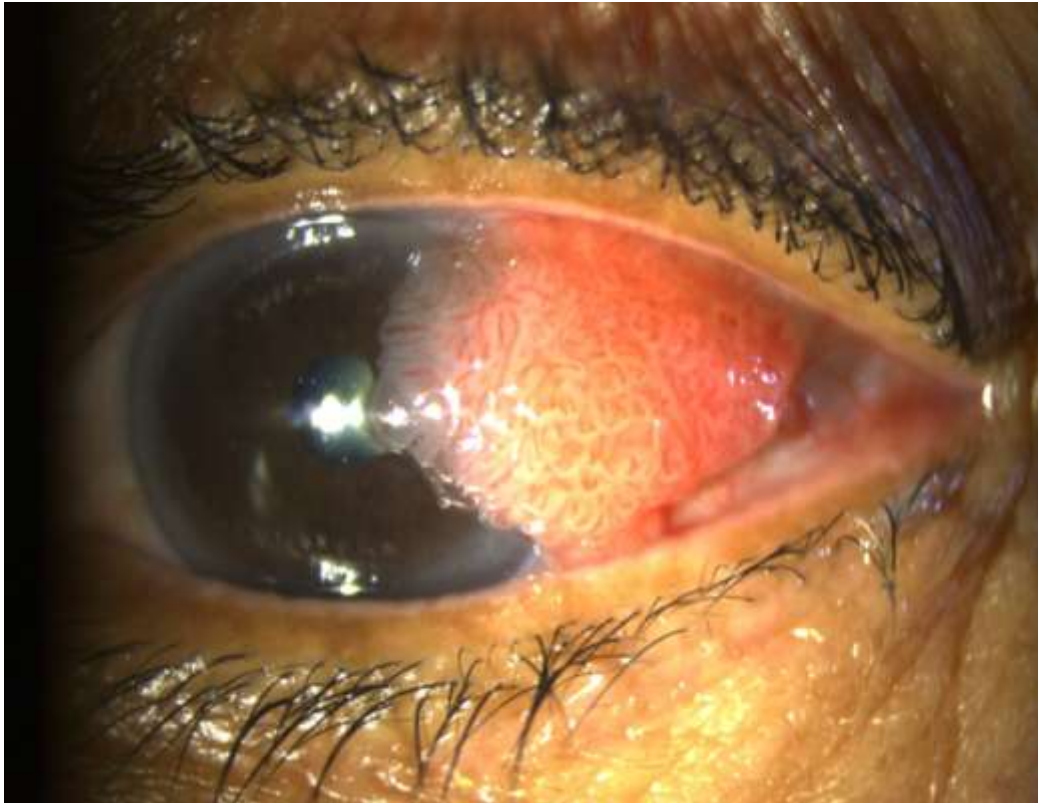
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I. Introduction :

Dysplasia and carcinoma in situ are rare lesions affecting adults of all races. From the age of 20, they represent approximately 10% of conjunctival lesions [1]. They are more common from the age of 55-60. Exposure to ultraviolet rays is the main risk factor [2]. We report through this observation the specificities of management of a rare conjunctival tumor that is squamous cell carcinoma in situ and which, when respected, leads to long-term remission.

II. Observation:

This is the case of a 60-year-old patient, with no particular history, of rural origin with regular sun exposure. Ocular irritation and cosmetic discomfort were the main reasons for consultation. She was referred to us for the treatment of a conjunctival outgrowth that rapidly increased in size over a few months, causing foreign-body-like discomfort. Ophthalmological examination revealed improved corrected visual acuity rated 7/10 on both eyes. The lesion was located temporally in the interpalpebral area, on the limbal conjunctiva and invading the cornea without affecting the visual axis. Lamp examination revealed a polyl-lobed oval papillomatous lesion with irregular contours, measuring 12 mm in long axis and receiving several feeder vessels. Examination of the anterior segment revealed a bilateral cortico-nuclear cataract. Examination of the eyelids after eversion revealed no other lesions, and the fundus was unremarkable.



Surgical treatment consisted of a complete excisional biopsy using the “no touch” technique with safety margins of 3 to 5mm.



The operative specimen sent for pathological examination showed a conjunctival mucosa with intra-epithelial proliferation of keratinocytes showing marked cytonuclear atypia and mitosis patterns covering the entire epithelial height, with no invasive tumour elements, which was in favour of carcinoma in situ with healthy excisional margins. This was followed by application of cryode to the conjunctival margins and limbus, combined with complementary local chemotherapy with mitomycin 0.02% at a dose of one drop four times per day in two 15-day cycles separated by a two-week recovery period, with weekly ophthalmological monitoring for the duration of the treatment. After an average follow-up of 36 months, the evolution was favorable judged on the absence of locoregional or distant recurrence.

III. Discussion:

Epithelial tumors of the conjunctiva include a wide spectrum of lesions ranging from simple dysplasia to invasive squamous cell carcinoma, including carcinoma in situ. They are more common in countries close to the equator, with incidences ranging from 0.3 per million in the USA to 19 per million in Australia. The main risk factors are sun exposure and infection by Human Papilloma Virus or HIV. Clinically, squamous cell tumors can take different forms: Papillomatous, gelatinous, leukoplakic or pterygoid, and cannot

becorrelatedwithhistological type. They can onlybestaged by anatomopathologicalexamination. In situ carcinomaischaracterized by the presence of cellular atypiathroughout the epithelium, withoutcrossing the basement membrane. The treatment for in situ squamouscellcarcinomasisbased on surgical excision using the 'No Touch' technique, combinedwithintraoperativecryotherapy and postoperativechemotherapybased on mitomycin C or 5-Fluorouracil, depending on the limits of excision.

Mitomycinis the mostcommonlyusedeye drop for the adjuvant treatment of carcinoma in situ [3]. Someauthorsalso use it as a first-line treatment [4]. At the Institut Curie, itisused as adjuvant treatmentaftercompletesurgical excision of carcinoma in situ. Mitomycineye drops at 0.02% are administered in two 15-day cycles (one drop 4 times per day), with 15 daysbetweeneach cycle. In case of relapse or incompleteexeresis, mitomycineye drops at 0.04% can beusedin 8-day cycles spaced 8 daysapart, but cornealtoxicityis more significant and warrants closerophthalmological monitoring. Treatment of carcinoma in situ withantimitoticeye drops has the advantage of treating the entireocular surface, includingclinicallyundetectedatypicalcells. A review of studiespublished in the literature shows similarefficacywith 5-fluorouracil and interferon alpha. However, whilemitomycinisfaster to resolvelesions, itisalso the drugwith the mostsideeffects.

IV. Conclusion:

Conjunctivalsquamouscellcarcinomas in situ remaintumourswith a good prognosis and a lowrisk of recurrence, especially if excision has been complete, cryotherapyperformed and postoperative addition of anti-mitotic agents evaluatedaccording to the case. A preoperativeassessmentisrecommended and conditions management as well as prognosis.

References :

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