



Pterygium Surgery: Trap to Avoid

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ABSTRACT

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We report the case of an 86-year-old man, operated for pterygium twice in 2015 and 2017, as far as the history of the disease is concerned, it dates back four years to the appearance of a conjunctivo-lymbic swelling of the left eye operated twice as a pterygium.

The evolution was marked by a rapid recurrence with appearance of cauliflower swelling.

At the slit lamp we found at the level of the left eye a swelling in bouquet or in conjunctival cauliflower invading the limbus and cornea in temporal and superior with superficial punctate keratitis.

The patient was admitted to a specialized center for chemotherapy.

Pterygium is a known benign condition whose radical treatment is surgical. But it should not be underestimated because it may be a differential diagnosis.

In particular conjunctival intraepithelial neoplasia (formerly Bowen's disease), hence the interest of biopsy with histopathological examination, whenever the pterygium seems atypical.

The interest of our case is to show that it should always be kept in mind that in some cases, the diagnosis of a pterygium may in fact turn out to be an ocular-surface squamous neoplasia.

KEYWORDS:

ocular-surface squamous neoplasia, pterygium

INTRODUCTION

Pterygium is a triangular conjunctivo-elastic neof ormation with a corneal tip in the area of the palpebral fissure (especially in the nasal area).

It is considered benign and its radical treatment remains purely surgical, with recurrence as the main complication.

Among the differential diagnoses of pterygium we find conjunctival intraepithelial neoplasia (formerly Bowen's disease and being part of *ocular surface squamous neoplasia* (OSSN)), which is a malignant tumor of the conjunctival epithelium.

Ocular surface squamous neoplasia (OSSN) are common malignancies of the conjunctiva and encompass a wide and varied spectrum of disease from dysplastic lesion to invasive squamous cell carcinoma [1]. The etiology appears to be a multifactorial, involving a variety of environmental factors in a susceptible host. Exposure to ultraviolet [2], aging [3], and smoking [4] have been implicated in the pathogenesis of CIN.

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This malignancy classically manifests as a non-pigmented, gelatinous conjunctival mass with feeder vessels and intrinsic papillary vascular pattern [5, 6]. This can mimic pinguecula, pterygium, papilloma, and conjunctival melanoma.

It often sits in the limbus, limited to the conjunctival epithelium, often invading the cornea, translucent, gelatinous, and finely vascularized with capillary arches. It can become an invasive lesion, hence its seriousness.

OBSERVATION

We report here the case of an 86-year-old man, having as antecedents: operation for pterygium twice in 2015 and 2017 as far as the history of the disease is concerned, it dates back four years to the appearance of a conjunctivo-lymbic swelling of the left eye operated twice as a pterygium.

The evolution was marked by a rapid recurrence with appearance of cauliflower swelling.

At the slit lamp we found at the level of the left eye a swelling in bouquet or in conjunctival cauliflower invading the limbus and cornea in temporal and superior with superficial punctate keratitis (Figure 1 a, b).

The patient was admitted to a specialized center for chemotherapy

DISCUSSION

Pterygium is a reputed benign condition whose radical treatment is surgery.

Different types of surgeries exist, the most frequently used is conjunctival autograft.

In this technique: a conjunctival graft is taken from the same patient (autograft) and the most often the same eye to cover the ablation site. This graft is taken from conjunctiva under the upper eyelid (for aesthetic reasons) except in cases of planned filtering surgery (the graft is then taken from the lower conjunctiva).

Removal is facilitated by the infiltration of lidocaine at the donor site in order to separate the tissue planes. Tenon's capsule is left in place at the sampling site to promote re-epithelialization of the harvesting site without sutures.

The conjunctival graft must always have a larger surface area than the site receiver (about 20%) in order to avoid any lack of substance and tension at the closure during tissue retractions. A suture of the graft at the ablation site should be careful, 2 mm from the limbus, with or without intrascleral points [7].

Anatomo-pathological examination of the operative specimen is not a common practice.

But in some cases it may be conjunctival intraepithelial neoplasia, a malignant conjunctival tumor that can in some cases become invasive.

An excisional biopsy with pathological examination therefore appears necessary in front of any "pterygium" suspicious of malignancy, this in order to set up an adequate treatment, the rather possible (local chemotherapy) and not to delay the care, as in our case.

Further a study by Kanako Nampei et Al. Based on the observation of the differences between the pterygium and the OSSN on AS-OCTA obtained results that can be useful for the differential diagnosis between these two pathologies: AS-OCTA observation showed "zigzag vessel patterns" in OSSN in both the superficial and deep layers. Conversely, in the pterygium, it revealed "straight vessel patterns" in the superficial layer and an "avascular pattern" in the deep layer of the head.

This can be an additional diagnostic tool in situations where there is doubt about the possible malignancy of a pterygium [8].

CONCLUSION

Pterygium is a known benign condition whose radical treatment is surgical. But it should not be underestimated because it may be a differential diagnosis.

In particular conjunctival intraepithelial neoplasia (formerly Bowen's disease), hence the interest of biopsy with histopathological examination, whenever the pterygium seems atypical.

Figure:

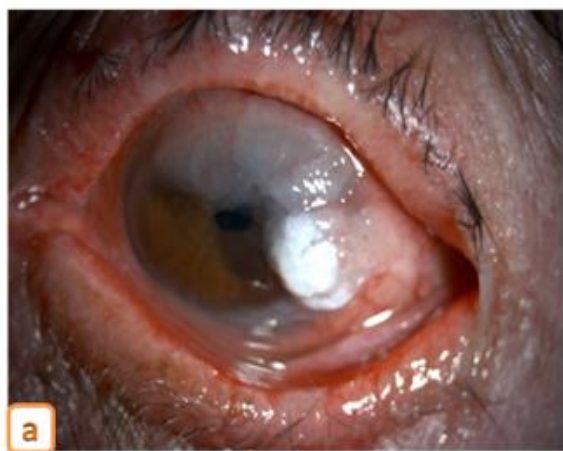


Figure 1 (a, b) : conjunctival cauliflower invading the limbus and cornea in the left eye

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