

Blue Conjunctival Nevi: A Benign Tumor of Atypical Localization, Conjunctival Blue Nevus: Benign Tumor Formed at an Atypical Location

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Received: August 23, 2015; **Published:** October 15, 2015

Abstract

Introduction: Conjunctival nevi are common benign ocular tumors and they represent 63% of conjunctival pigmented lesions. The blue nevi are found in about 1% of cases. They can take the appearance of a malignant tumor after melanoma. Surgical treatment by complete excision followed by histological analysis is essential.

Clinical case: A 65 year old man was referred for surgical management of cataracts. He had a history of lower eyelid surgery left eyelid surgery following trauma 10 years ago. During the physical examination, a black pigmented lesion was observed in the internal third of the lower left eyelid on the conjunctival side. Before the appearance of the suspect lesion excision, histological analyses were performed. Microscopic examination observed a scattered population melanocytic pigmented fusiform shape. These cells were pigmented melanin granules and intriquaient to a fibrous frame without suspect character. Immunohistochemistry revealed a moderate expression of Melan A, HMB 45 and PS100. And Ki67 proliferation coefficient less than 5% the diagnosis of Benin blue nevus was made selected.

Discussion: In about 1% the histological diagnosis was done to conclude a blue nevus. It is a benign melanocytic tumor and melanocytes are pigmented, fusiform and dendritic. They are often accompanied by melanophages usually in a fibrous stroma. They can be congenital or acquired and can take perverse that aspect as melanoma or basal cell carcinoma. Treatment is the total resection. The diagnosis is histological.

Keywords: Blue Nevus; Conjunctive; Benign Tumor; Melanocytic Tumor; Pigmented Histiofibroma; Melanoma

Observation

Introduction

Conjunctival nevi are common benign ocular tumors. They represent the most common pigmented lesion of the conjunctiva (63%) [1]. they are characterized by a multitude of different presentations, by color, location, shape and scalability.

The blue nevus is a particular type of nevi: we speak of melanocytic tumor benign melanocytes which are pigmented, fusiform and dendritic often accompanied melanophages, usually in a fibrous stroma [2]. Very rare in the conjunctiva, they represent about 1% of cases of conjunctival nevi [3]. They are located particularly in the bulbar conjunctiva in 70 % of cases and caruncular in nearly 15% of cases and more rarely on the tarsal conjunctiva (1%) [3,4].

Clinical Case

A 65 year old man was referred by his doctor for surgery of cataract. The patient is treated for a balanced blood pressure, a balanced non insulin dependent diabetes and hypercholesterolemia. He had a history of lower eyelid surgery left after trauma 10 years ago.

Citation: Allan Benarous., et al. "Blue Conjunctival Nevi: A Benign Tumor of Atypical Localization, Conjunctival Blue Nevus: Benign Tumor Formed at an Atypical Location". *EC Ophthalmology* 2.5 (2015): 155-159.

During the pre-surgical consultation, visual acuity was assessed 4/10 P2, the lamp exam Slit found a clear cornea and anterior chamber of both eyes calm, cortical cataract and posterior sub capsular left. The eyelid review helped in revealing a dark lesion in the medial third of the lower left eyelid on the conjunctival side. The examination of the fundus found a flat retina, without signs of AMD and a lack papillary excavation on both sides. The measurement lack of the intraocular pressure did not find ocular hypertension right and left. A total resection and histological analysis in pathology were performed because of the dubious nature of the pigmented lesion in the left lower eyelid.

The histological study allowed observing a scattered population melanocytic pigmented fusiform morphology. These cells were pigmented melanin granules and intriquaient to a fibrous frame without suspect character (Figure 1-2).

Immunohistochemistry revealed a moderate expression of Melan A and HMB 45 by nevus cells, and a proliferation of PS100 coefficient Ki 67 less than 5% (Figure 3-6). The review concluded occurrence of a rare diagnosis conjunctival level: Benin a blue nevus.

Discussion

Conjunctival nevi are common benign ocular tumors.

They are characterized by a multitude of different manifestations [5], in terms of:

1. The color: brown (55%), blue (20%), green (20%) [4].
2. Their pigmentation: pigmented in nearly 65% of cases, no dyed in nearly 20 % and non-pigmented in nearly 15% of cases [4].
3. Their location: temporal (46%), nasal (44%), higher (6%) and lower (5%) [4].
4. The type conjunctival: bulbar in 70 % of cases, caruncular in nearly 15 % of cases and tarsal in about 1% of cases [3,4].

The blue nevi are benign melanocytic tumors which are pigmented melanocytes, fusiform and dendritic often accompanied melanophages, usually in a fibrous stroma [2]. They can be congenital or acquired and may take aspects such as malignant melanoma or basal cell carcinoma [6].

There are many types of blue nevus: the common blue nevus, the most common, cellular blue nevus and blue nevus epithelioid [2,5]. The most common of the common blue nevus locations are at the backs of the hands and feet and head region. They are also found rarely in oral and genital mucosa [2,6-8]. They usually measure less than 2 cm in diameter and are generally single, small size and dark blue [2,8].

Histologically, there is a proliferation of spindle often very heavily pigmented cells of melanin granules and is intriquent to a very thick fibrous stroma. The architecture is fascicule without sharp boundary [8]. Its main differential diagnosis is another benign lesion: the pigmented histiocytoma [2].

The conjunctival level, nevus is the most common pigmented lesion, it represents 52% of pigmented conjunctival tumors [5]. It is found in nearly 63% of conjunctival pigmented lesions [1]. The definitive diagnosis can be made only by histological examination in pathology.

In about 1% of cases, a blue nevus is diagnosed [3,5]. It typically has a bluish reflection and frequently adheres to the sclera. In addition, it is always pigmented and does not include cystic inclusions [1]. It is a benign melanocytic derived dermal cell. It can be found in the mucous membranes (oral, nasal, genital, pulmonary) and rarely conjunctival levels [5].

The treatment required for this type of injury is the complete surgical excision with histological analysis to remove a malignant pigmented conjunctival lesion. The post-resection recurrence is rare but that might suggest the beginning of malignant transformation [5]. Monitoring is therefore necessary in this type of lesion.

Conclusion

A pigmented lesion left lower eyelid conjunctival side of the blackish appearance with a doubt Benin character of this lesion is presented. Histological study of the Benin blue nevus showed revealed to remove a malignant pigmented lesion in the tarsal conjunctiva. Conjunctival location and the suspicious behaviour of the lesion led us to its complete excisional biopsy and diagnosis of certainty of blue nevus.

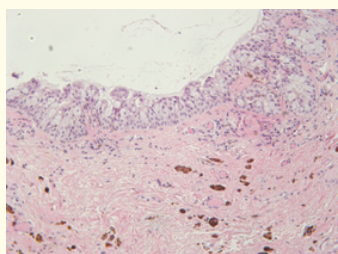


Figure 1: Coloration Hemateine – Eosine. Grossissement 20. Population melanocytaire dispersee pigmentee d'allure fusiforme.

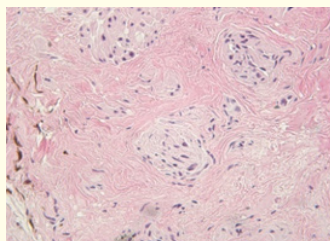


Figure 2: Coloration Hemateine – Eosine. Grossissement 40. Cellules pigmentees de grains de melanine dans une trame fibreuse sans caractère suspect.

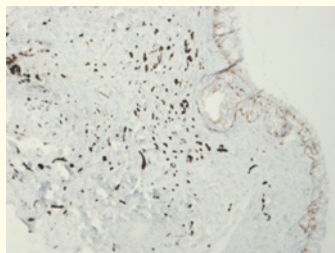


Figure 3: Immunomarquage modere de Melan A.

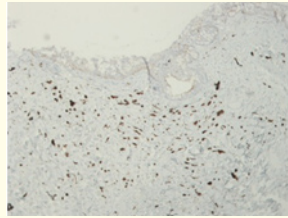


Figure 4: Immunomarquage modere de HMB 45.

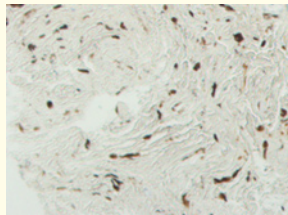


Figure 5: Immunomarquage de PS 100.

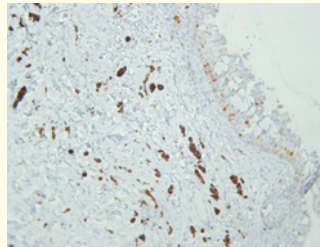


Figure 6: Coefficient de proliferation Ki 67 < 5%.

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Volume 2 Issue 5 October 2015

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