

Intrapunctal nevus presenting with inflammatory symptoms

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ABSTRACT

A nevus is usually an in-born hamartomatous benign tumour that is solitary, well circumscribed, flat or slightly elevated with smooth or lobulated surface. Congenital nevi are present in nearly 2-3% of all newborns. An 83-year-old man presented with watering and itching of the left eye that was associated with a pigmented lesion involving the left upper intra-punctal and peri-punctal region. The lesion was excised and was confirmed to be a nevus. To our knowledge, this is the first report of an intra-punctal nevus in Brunei Darussalam. All doubtful pigmented lesions of the conjunctiva and those at unusual sites should be subjected to histopathological studies in order not to miss a malignant lesion.

Keywords: Eyelids, peripunctal, intrapunctal, nevus

INTRODUCTION

A nevus is usually an in-born benign hamartomatous solitary well circumscribed, flat or slightly elevated tumour with smooth or lobulated surface. Congenital nevi are present in nearly 2-3% of all newborns. ¹ The conjunctiva is a common location for nevi. These lesions maybe melanocytic (pigmented) or amelanotic (non-pigmented). Conjunctival melanocytic nevi are estimated to account for between 13% and 43% of all conjunctival tumours. ² Most appear in the

first or second decades of life but can appear in all ages. ² The inter-palpebral area of the eye is the most commonly affected site. Changes in pigmentation may occur in up to 5% and the size in up to 7% of cases around puberty. ³ The clinical features of these benign pigmented lesions at times can overlap with malignant pigmented lesions, causing a diagnostic challenge. Transformation of conjunctival nevus into a melanoma is reported to be very low (<1%). ³ Conjunctival nevi occurring over the tarsus are rare. ⁴ In clinical practice, differential diagnosis of pigmented lesions arising from the upper tarsal conjunctiva or lower fornix should include melanomas or melanoma pre-cursors. ⁵ Peripunctal nevus

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is an uncommon entity of the eyelid margin.⁶⁻⁹ To the best of our knowledge, this is the first report of intraocular nevus reported in Brunei Darussalam.

CASE REPORT

An 83-year-old man was referred to the eye clinic with a rapidly enlarging swelling at the medial end of the left upper lid. This was associated with itch and watering for the past six to eight weeks. He denied having any pain or discharge from the eye. He had previously received treatment in the form of topical antibiotics from his general practitioner without any improvement. His past medical history included systemic hypertension, hyperlipidemia, gout, ischaemic heart disease, coronary artery bypass surgery and branch vein occlusion in his left eye (1993).

Examination showed a watery left eye with erythema and swelling of the medial end of the upper eyelid. The punctum was prominent, hyperaemic and pouting. The punctal orifice was enlarged with oedematous and pigmented punctal mucosa blocking the stoma (Figure 1). The mucosa appeared vascular. Gentle manipulation of the upper punctum and canaliculus elicited mild tenderness, but no friability and no regurgitation of mucus

or pus. The peripunctal tarsal conjunctiva showed areas of pigmentation. There was hyperaemia around the punctum extending into the tarsal conjunctiva. The punctum had a firm feel.

There were no enlarged draining lymph nodes. Lacrimal passages remained patent when tested through the lower punctum. Tear studies were normal. Ocular examination was otherwise normal in his both eyes except for evidence of immature cataracts. Based on the characteristic findings, a provisional working diagnosis of left upper intrapunctal nevus/melanoma was made.

The patient proceeded to surgical excision. Under local anaesthesia with sedation, and topical and systemic antibiotic coverage, the patient's left upper punctum was slit open to establish the extent of the pigmented growth. It was observed that pigmentation did not extend into the canaliculus. The punctum was excised along with the pigmented tarsal conjunctiva and the specimen was sent for histopathological studies. The canalicular entrance was temporarily blocked with punctum plug. He was started on topical Neomycin/Dexamethasone eye drops four times a day and fusidic acid eye ointment twice daily in

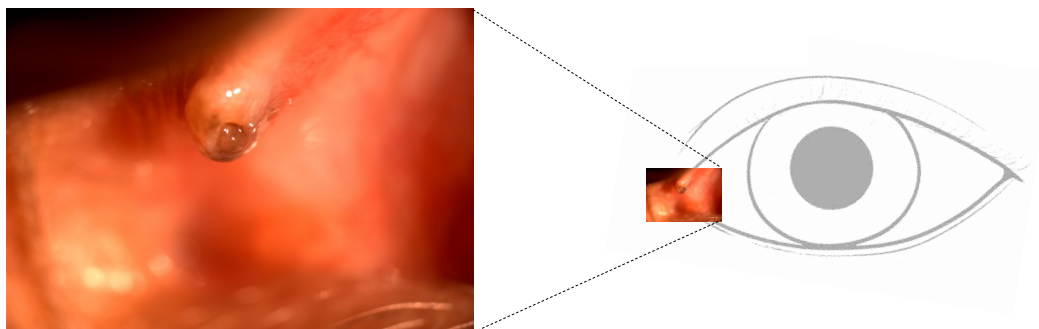


Fig. 1: A pigmented lesion involving the intrapunctal and peripunctal regions at the time of presentation.

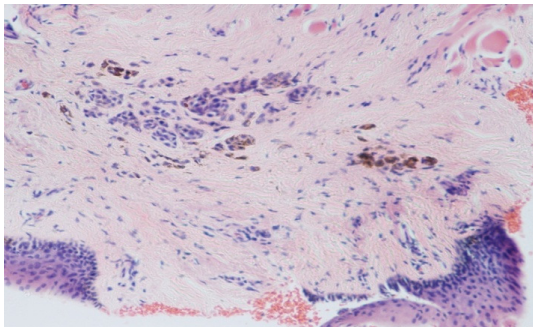


Fig. 2: Histopathology of the lesion showing clumps of pigmented cells consistent with histological appearance of a nevus with no junctional activity (H&E stain, x10).

the left eye.

The histopathology examination confirmed the lesion to be a conjunctival nevus with no junctional activity (Figure 2).

During the second review, two weeks later, the wound had completely healed, the punctal plug was lost and the canalicular entrance was covered with scar tissue (Figure 3). He was followed-up in the clinic for six months after surgery with no recurrence of symptoms or pigmentation.

DISCUSSION

Conjunctival nevi are the most common benign pigmented neoplasia arising from the eye. It can present with diverse clinical fea-

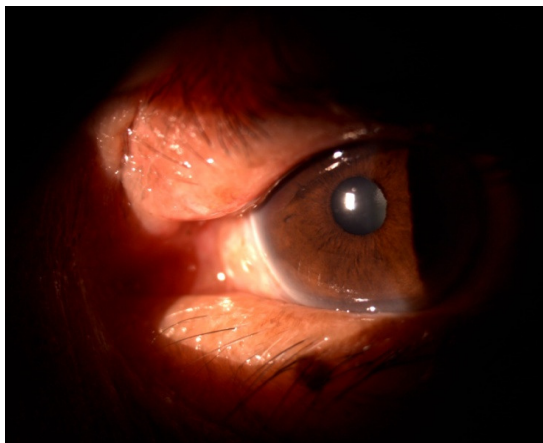


Fig. 3: Appearance of the eye six weeks after excision of the punctum of the upper eyelid.

tures, heavily pigmented to a completely apigmented, diffuse collection to total absence of cysts, and from pin point size to those occupying large areas of epibulbar surface.^{10, 11} The non-melanocytic variety may resemble other non-pigmented lesions such as inflamed pingueculum, foreign body granuloma and episcleritis. Presence of cysts is a differentiating feature of conjunctival nevus which can be observed in 65% of cases even if they are located in the tarsal conjunctiva.^{2, 5} Satellite lesions, though rare, may turn out to be benign.¹² Differentiation between a nevus and a melanoma is very important as the management and prognosis are different. Histopathological study of the biopsied specimen is only prudent method to establish the benign nature of the pigmented lesion.⁴ In spite of age, location, rapidity of growth and vascularity, along with compelling symptoms and signs mimicking melanoma, the growth in our patient turned out to be benign.

Various treatment options such as simple excision and excision with reconstruction using amniotic membrane have been reported.¹³ Argon laser ablation has also been reported as a safer alternative treatment for benign pigmented conjunctival lesions, and is expected to replace surgical intervention.¹⁴

In conclusion, it is important to assess the colour, duration, recent increase in size, age of the patient, location of the growth, and presenting symptoms and signs when evaluation a pigmented lesions. Periodic photo-

graphs documentation is helpful in assessing the changes over time. Slit lamp biomicroscopy may aid to establish the presence of cysts and vascularity within a suspected lesion. Histopathological studies of all doubtful pigmented lesions and those at unusual sites should be done to establish the nature of the neoplasm.

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