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Case Report

AMYLOID IN EYE LID- A RARE FEATURE

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ABSTRACT

Amyloidosis of the eyelid is uncommon and is typically associated with systemic associations. In contrast, amyloidosis of the conjunctiva is often localised with no other associations. We present a rare case of a 54-year-old gentleman with both cutaneous lid lesions and conjunctival amyloid with no systemic involvement. Biopsy demonstrated the hallmarks of amyloid and treatment has remained conservative. He remains at the department to be monitored for secondary glaucoma.

Key words: amyloid ,eyelid, Amyloidosis

INTRODUCTION

Amyloidosis is a complex disorder involving the deposition of abnormally folded proteins which can affect various areas of the body including the orbit [1–3]. It can present with a diverse array of symptoms depending on which organs are affected [4]. Classification has changed from primary and secondary amyloidosis to light chain amyloidosis and amyloid A protein amyloidosis [1]. It is important clinically to further classify amyloidosis into localised or systemic as systemic amyloidosis can prove to be fatal [4]. Conjunctival and lid amyloidosis is particularly rare [1, 5, 6]. When the lid is affected, it is often found to be associated with systemic conditions [6–8]. In contrast, amyloidosis of the conjunctiva is often localised with no other associations [5, 8].

EXPERIMENT WORK

A woman aged 54 years complained of a gradually increasing swelling of the upper and lower lids of both eyes for the last 12 months and of difficulty in seeing. The swelling of the lids started from the inner angles and had involved the right side more than the left. Examination.- The right side showed a uniform thickening of the upper and lower lids with a well-defined firm round nodule nearly 3 cm. in diameter on the medial third of the upper lid. The nodule is not tender and was not adherent to the skin. A detailed examination of the eyes was not possible owing to the narrowed palpebral fissures. The palpebral conjunctiva could not be examined as it was not possible to evert the lids. The patient denied having applied or injected any irritant to the eyes, and there was no history of any chronic infection in the eye or elsewhere.

RESULTS

The tissue bits measured nearly 2.5 cm. in largest dimension. They were uniformly yellowish in colour and of firm consistency. One of the cut pieces was treated with iodine which stained it brown and the colour changed to blue on addition of sulphuric acid thus suggesting the presence of amyloid in the tissue. Histologically, the nodules were composed.of large masses of a homogeneous, nonfibrillar, eosinophilic hyaline material lying beneath the conjunctival epithelium beneath .The deposition was diffuse but predominated around the blood vessels .The lumen of the blood vessels was markedly narrowed and often occluded because of the infiltration of the hyahine material into the vessel walls. Chronic inflammatory cells in which lymphocytes and plasma cells were prominent were seen lying in groups below the conjunctival epithelium, round about the blood vessels and within the diffuse hyaline mass of amyloid tissue. The hyaline masses showed the typical metachromatic reaction with Congo red which stained it pinkish-red and apple green bifringence under polarising light.

DISCUSSION

Amyloidosis is characterised by misfolded proteins which are deposited within extracellular space in various tissues and organs, including the orbit [1–3]. It can be both systemic and localised [1, 7]. Amyloidosis of the conjunctiva and eyelid is a rare entity that is typically benign [5, 6, 9]. Preceding causes for amyloidosis can include trauma, infection, and inflammation [5]. When confined to the conjunctiva the amyloid tends to be localised, whereas cutaneous lesions are characteristically associated with systemic disease [1, 7, 8]. Interestingly, our case showed evidence of both lid and conjunctival amyloid but no systemic associations. This is similar to the rare care reported by Pelton et al. [8]. Patients may present with general eye discomfort, stickiness of the eye, or lid deformity [1, 6, 7, 10]. Rarely, it can present with something as innocuous as subconjunctival haemorrhage, due to friability of amyloid deposits [3, 11, 12].

Identification early on is difficult as the characteristic waxy yellow or red lesions which bleed do not appear till later in its clinical course [1, 10]. Biopsy is indicated to rule out malignancy [1, 7]. After Congo red staining, amyloid typically shows apple-green birefringence when examined with light microscopy [1, 4, 13]. Systemic examination and investigations are required to rule out both systemic amyloid and also neoplastic plasma cell disease [4, 9]. The mainstay of treatment appears to be lubricants and steroids to control symptoms [2, 10]. Surgical intervention has proved controversial due to risk of recurrence and haemorrhage; however, there are reports demonstrating excision including en bloc removal as a treatment [3]. Monitoring for secondary glaucoma is recommended as the amyloid depositscan infiltrate the trabecular meshwork [14]. Secondary glaucoma in these cases responds poorly to medical treatment, and surgery may be tentatively used as in refractive cases [15], but there is not much evidence to support this approach.

CONCLUSION

Figure 1:

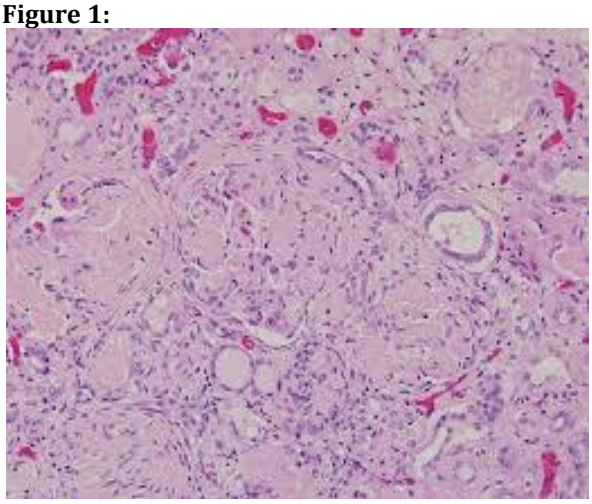
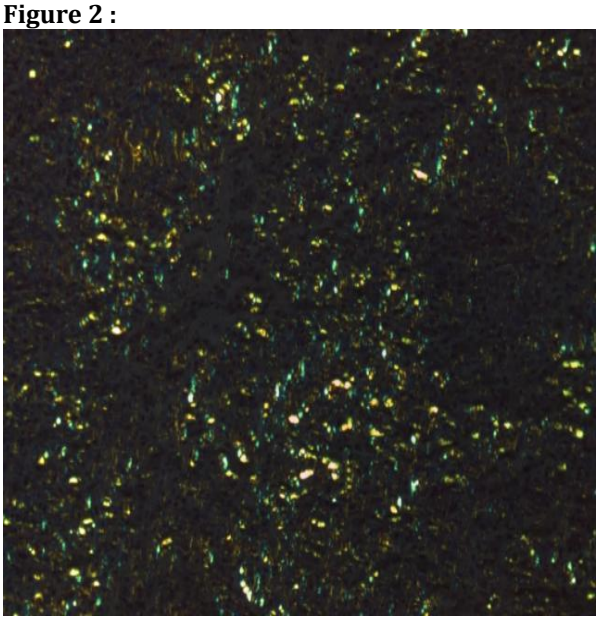


Figure 2 :



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