LETTER TO THE EDITOR

Ocular amyloidosis: A direct view of the amyloid plaques

Amylose oculaire : un focus sur les plaques amyloïdes

A previously healthy 71-year-old woman presented to our ophthalmology department with a 4-year history of eyelid hematomas and subconjunctival haemorrhages in both eyes (Fig. 1). There was no history of blood dyscrasia in the family. Her past ocular history only included bilateral superior blepharoplasty. Upon examination, a yellowish mass attached to the bulbar and tarsal conjunctiva was observed in both eyes (Fig. 2).

Aside for ocular lesion, physical examination was normal. There were no signs of underlying disorders such as trauma, inflammation, infection (including trachoma) or previous conjunctival surgery.

Excisional biopsy of the conjunctival lesions found subepithelial amyloid deposits. Immuno-histochemical examination was negative for AA protein and non-conclusive for kappa and lambda light-chains (Fig. 3 et 4).

In order to exclude a secondary systemic amyloidosis, bone and chest radiographies and abdominal ultrasonography were performed with normal results. No proteinuria was found on the urine test, and no monoclonal bands of free light chains were detected either in the blood or the urine tests. There was no evidence of haematological or other systemic disease.

After discarding systemic and local causes for the deposit of amyloid, the diagnosis of primary localized amyloidosis was assumed.

Localized amyloidosis is the most frequent form of ocular involvement, consisting in conjunctival plaques of amyloid material. Amyloid is typically stained with Red Congo dye. The immuno-histochemical study, when conclusive, is positive for lambda and kappa light chains. Unfortunately, it can only be demonstrated in a few cases of conjunctival amyloidosis [1]. The main treatment for ocular primary amyloidosis is surgical removal of the plaques [2].

Amyloid infiltration of vessel walls causes capillary wall fragility which leads to purpura and ecchymosis after minor trauma or even spontaneously [3]. Periorbital area is one of the most common sites of purpura expression.

Figure 1. Ecchymosis and purpura of the inferior eyelid was observed on clinical examination.
Figure 2. A yellowish plaque is observed in the conjunctiva.

Figure 3. Biopsy section of the conjunctival lesions. Hematoxylin-eosin, original magnification ×20.

Figure 4. The amyloid material is positive for staining with Congo Red dye (original magnification ×10).

Disclosure of interest

The authors declare that they have no competing interest.

References


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