Congenital fibrovascular pupillary membrane

Membrana pupilar fibrovascular congênita

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Figure 1. Congenital fibrovascular pupillary membrane

Congenital fibrovascular pupillary membrane⁽¹⁻⁴⁾ is an unilateral ocular change of the anterior segment (Figure 1). This abnormality was first reported by Cibis et al. in 1986.⁽⁵⁾

In some cases, progressive miosis, posterior embryotoxon and abnormality of the anterior chamber angle have been documented. Pupillary membrane might not be adhered to crystalline, or it can also be associated with anterior capsular cataract. (6)

Instillation of mydriatic agents, normally results in poor pupillary dilation, because of adherences between pupillary membrane and the iris, or posterior synechiae.⁽⁷⁾

When the red reflex is no longer visible or severely compromised, surgery should immediately be indicated, with the aim to rescue the view and prevent amblyopia. (8-10)

These eyes are usually treated with a membranectomy and pupilloplasty with or without a lensectomy.

After fulfilling the anterior chamber with the viscoelastic, the pupil was mechanically distended and subsequently the fibrovascular membrane was resected (sphincterectomy was not required). For patients who require only membranectomy, it is important to be careful as not to cause traumatic cataract, by accidently touching the anterior capsule of the crystalline.

In the postoperative period, the left eye was treated with prednisolone acetate 1% and cyclopentolate chloridrate 1% eyedrops. Crystalline lenses remained clear on both eyes. Posterior to that, glasses were prescribed and occlusion antisupressive therapy in partial time, of contralateral eye.

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Congenital fibrovascular pupillary membrane is often characterized in its histology, for presenting fibrovascular tissue, containing venules and arterioles, fibrocytes and extracellular collagen and immunoreactive elongated cells for smooth muscle.

The congenital fibrovascular pupillary membranes, can return if not completely removed. Progressive miosis associated to the recurrence of these membranes is, probably mediated by myofibroblast.

In conclusion, when indicated, the surgery must be conducted as early as possible, otherwise, an irreversible visual dysfunction may appear due to stimulus deprivation, causing the amblyopia.

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