

Vitreous Detection of Microfilaria in Loa Loa Infection

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Advantages:

Filariasis due to the nematode *Loa loa* is an endemic parasitic infection in Africa. The increasing incidence in Europe is associated with recreational tourism and African immigration. To our knowledge, intravitreal isolation of *Loa loa* microfilaria has not been previously documented.

Methods:

We present the case of an Equatorial Guinean patient with visual loss of four months evolution. Ocular exploration of the left eye showed a cloudy and organized vitreous. Systemic exploration revealed a subcutaneous nodule in the left supraclavicular area. These findings led to an initial presumed diagnosis of onchocercosis. Nodule extirpation and diagnostic vitrectomy were performed. Pathologic findings of the supraclavicular mass were consistent with lipoma. Vitreous material was composed of erythrocytes and multiple *Loa loa* microfilaria confirmed by polymerase chain reaction. A posterior pole pigmented chorioretinal scar temporal to the fovea was found after vitreous removal. Visual outcome was poor.

Effectiveness / Safety:

Loa loa ocular manifestations can be variable: subconjunctival, anterior chamber or vitreous worms, uveitis, retinal haemorrhages, arteriolar obstruction or central retinal arterial occlusion. The presence of microfilaria in the vitreous cavity has not previously been documented. The exact way of entry of such filariae into the vitreous cavity is not known. The possible ways may be through the sclera, from choriocapillaries through the retinal layers, through the optic nerve head or through an intraocular haemorrhage like in our patient. The present case is also particular by the coexistence of a supraclavicular nodule. This finding is usual in onchocercosis, and that was our first presumption diagnosis.