

Myelinated Retinal Nerve Fibers

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Clinical Image

We report a case of a 25-year-old-woman, with no pathological history. The patient presented to ophthalmology consultation for a routine eye examination.

Her Uncorrected visual acuity was 10/10 for both eyes. On slit lamp examination, anterior segment was normal, while fundus examination was found to have on the left eye, a flat grayish-white area with irregular borders concentric to the optic disc. Otherwise the posterior segment examination of left eye was normal. Our diagnosis was myelinated retinal nerve fibers.

The first clinical description of myelinated retinal nerve fibers was in 1856 by Virchow[1]. According to several authors: it corresponds to myelination of retinal nerve fibers, which are normally devoid of myelin. It is represented clinically as white to grey patch following the distribution of the nerve fibres, with irregular feathery borders. The area of myelination can be concentric to the optic disc or in periphery retina[1, 2].

Several studies report that it is due to dysfunction of the lamina cribrosa and to ectopic oligodendrocytes[2].

Also, previous studies concerning clinical and pathologic features have reported that it is a congenital anomaly that occurs in 0.5% to 1% of the population[1,3]. Usually asymptomatic and unilateral, and can be associated with myopia and amblyopia. [2, 4,5,6]

Conflict of interest: The author declares that there is no conflict of interest.



Figure 1: Fundus photography showing a thick bunch of myelin fibers concentric to the optic disc.

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