

A case of cilioretinal artery with hemiretinal distribution

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The retinal vasculature is usually supplied by the central retinal artery (CRA), This is the first branch of ophthalmic artery in 77.5% (1). Cilioretinal arteries are reported to be present in up to 50% of eyes, and are considered to be the most common retinal vascular anomaly. Cilioretinal arteries take rise from a posterior ciliary artery (2). They may vary in size, number, distribution and point of origin from the optic disc. In most of the cases they are small arterioles supplying a part of central retina from the fovea to the optic disc. Only in 0.6%, large cilioretinal arteries can supply more than a quarter of the retinal circulation (3). We present a rare case of an individual with asymmetrical cilioretinal artery that arise inferiorly and supply the entire inferior emiretina. D.N., 7 years old male, affected by hyperopic astigmatism in both eyes. Clinical exam revealed no diseases. Examination of the fundus oculi showed, in the right eye, the presence of a very common small cilioretinal artery running from the disc to the foveal avascular zone. In the left eye, the central retinal artery gave rise only to two superior branches; a large cilioretinal artery entered the disc area from its inferotemporal edge, and gave rise to two inferior arterial branches. Thus, in the left eye, the CRA feeds the superior half of the retina; the large cilioretinal artery supplies the inferior half of the retina. Retinography was performed using a Confocal Color Scanning Ophthalmoscope (Eidon). This type of uncommon variant of retinal vasculature prevents extended retinal ischemia due to CRA occlusion.

References

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Keywords

Cilioretinal artery; retinal arteries; central retinal artery.