

Congenital retinal macrovessel in a patient with rhegmatogenous retinal detachment

A 48-year-old female presented with old inferior rhegmatogenous retinal detachment (RRD) with demarcation line encroaching the macula [Fig. 1a]. Best corrected visual acuity was 20/30. Lattice degeneration with atrophic holes was noted at 6'o clock meridian. A branch of the infero-temporal retinal vein coursed upwards through the fovea and crossed

the horizontal raphe. Fundus fluorescein angiogram [FFA, Fig. 1b] confirmed this vessel to be of venous origin and showed absence of foveal avascular zone. Old RRD leading to retinal pigment epithelium (RPE) atrophy showed as hyper fluorescent area while blocked fluorescence was seen in relation to the demarcation line because of RPE hypertrophy. Vertical spectral domain optical coherence tomography scan [Fig. 1c] through macula showed inferior subretinal fluid. The vessel passing through the macula was seen in inner retinal layers with shadowing underneath [blue arrow, Fig. 1c]. The patient was diagnosed with congenital retinal macrovessel (CRM) and inferior RRD. The patient underwent uneventful scleral

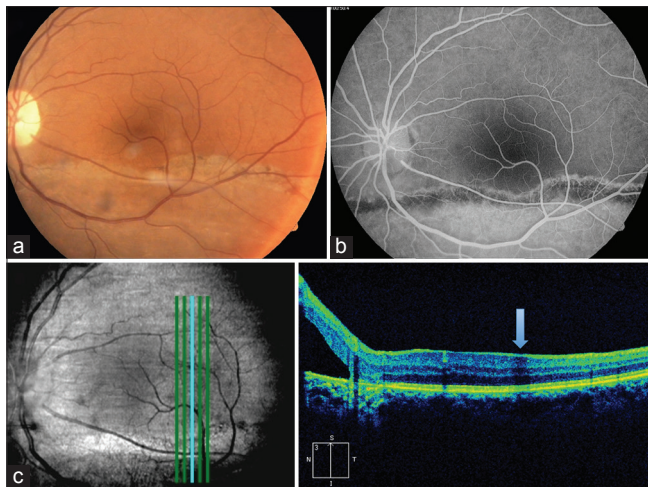


Figure 1: Colour fundus photograph (a) showing inferior rhegmatogenous retinal detachment with demarcation line. A branch of the infero-temporal vein passes through the fovea. Fluorescein angiogram (b) shows demarcation line and confirms venous origin of congenital retinal macrovessel. Vertical spectral domain optical coherence tomography scan (c) shows congenital retinal macrovessel (blue arrow) and inferior subretinal fluid

buckling surgery. Visually acuity was maintained at 20/30 and retina was attached at 6-month follow-up.

CRM is rare congenital anomaly and consists of aberrant branch of a retinal vessel crossing the macula and horizontal raphe.^[1] Commonly, CRM is a vein, but it may arise from an artery as well and is usually asymptomatic.^[1] Visual loss in patients with CRM has been attributed to serous detachment,^[2] macro aneurysm,^[3] branch retinal artery occlusion,^[4] macular haemorrhage, vitreous haemorrhage,^[5] foveal cyst, or mere presence of blood vessel.^[1] FFA in CRM usually reveals early filling and delayed emptying and may be associated with dilated capillary bed surrounding the vessels.^[6] CRM has never been reported in patient with RRD. The association of the two appears to be coincidental though.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Vinod Kumar, Neha Goel¹

Dr. Rajendra Prasad Centre for Ophthalmic Sciences, All India Institute of Medical Sciences, New Delhi, ¹ICARE Eye Hospital and Post Graduate Institute, Noida, Uttar Pradesh, India

Correspondence to: Dr. Vinod Kumar,

Dr. Rajendra Prasad Centre for Ophthalmic Sciences, All India Institute of Medical Sciences, New Delhi, India.

E-mail: drvinod_agg@yahoo.com

References

1. de Crecchio G, Alfieri MC, Cennamo G, Forte R. Congenital macular macrovessels. *Graefes Arch Clin Exp Ophthalmol* 2006;244:1183-7.
2. Kumar V, Ghosh B, Raina U, Goel N. Central serous chorioretinopathy (CSCR) in a patient with congenital retinal macrovessel. *Can J Ophthalmol* 2009;44:e57.
3. Goel N, Kumar V, Seth A, Ghosh B. Intravitreal bevacizumab in congenital retinal macrovessel with retinal arteriolar macroaneurysm. *Saudi J Ophthalmol* 2015;29:292-4.
4. Goel N, Kumar V, Seth A, Ghosh B. Branch retinal artery occlusion associated with congenital retinal macrovessel. *Oman J Ophthalmol* 2014;7:96-7.
5. Goel N, Kumar V, Ghosh B. Congenital retinal macrovessel associated with vitreous hemorrhage. *J AAPOS* 2017;21:83-5.
6. Brown GC, Donoso LA, Magargal LE, Goldberg RE, Sarin LK. Congenital retinal macrovessels. *Arch Ophthalmol* 1982;100:1430-6.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code:	Website: www.ijo.in
	DOI: 10.4103/ijo.IJO_838_18

Cite this article: Kumar V, Goel N. Congenital retinal macrovessel in a patient with rhegmatogenous retinal detachment. *Indian J Ophthalmol* 2018;66:1860-1.