

Branch retinal artery occlusion with embolic movements

Xinyan Xu, Lei Gao, Xiaowei Yang

Key words: Branch retinal artery occlusion, embolic, hypertension

A 59-year-old man with poorly controlled hypertension presented with an acute, painless, partial visual loss in the left

eye for 5 days. Ultra-wide field retinal color and red-free image of the left eye showed retinal whitening in the inferior macular region along the distribution of the affected inferior branch retinal artery. The site of obstruction with a tiny refractile emboli at the first bifurcation of the inferior temporal arteries was noted [Fig. 1a and c; arrow]. Branch retinal artery occlusion was diagnosed and anterior chamber paracentesis was performed immediately. Three days later, repeated examination showed the emboli had moved forward to the third bifurcation [Fig. 1b and d; arrow], and no new retinal edema was found in the

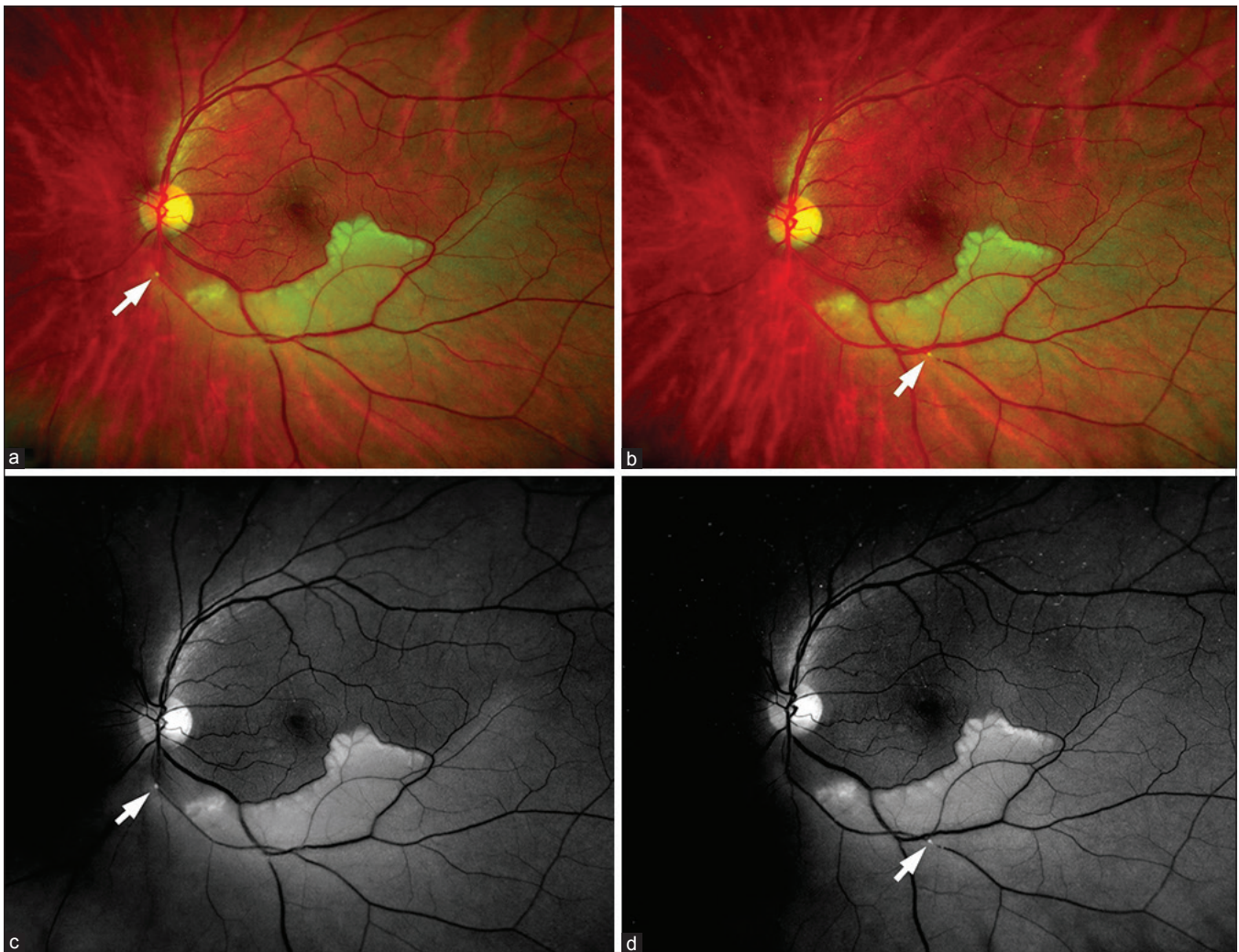


Figure 1: Ultra-wide field retinal image of the left eye with inferior branch retinal artery occlusion from an embolus. The embolus movement from a to b arrow and red-free photograph (Panel c and d) greatly accentuates the retinal whitening and embolus

Access this article online	
Quick Response Code:	Website: www.ijo.in
	DOI: 10.4103/ijo.IJO_389_19

Weifang Eye Hospital, Xingfujie, Kuiwenqu, Weifang, China

Correspondence to: Dr. Lei Gao, Weifang Eye Hospital, Qingdao University, Weifang, Shandong, P R China. E-mail: gl6365@163.com

Manuscript received: 26.02.19; **Revision accepted:** 19.03.19

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.

For reprints contact: reprints@medknow.com

Cite this article as: Xu X, Gao L, Yang X. Branch retinal artery occlusion with embolic movements. Indian J Ophthalmol 2019;67:1472-3.

distal part of the new obstruction. The patient's visual acuity was unchanged with best corrected 20/20 and he was left with a deficit in the superior visual field. In addition to hypertension, no other systemic abnormalities were found.

Branch retinal artery occlusions occur secondary to an embolus which is most likely to occur at the bifurcation of an artery.^[1] Surgical embolectomy and rescue vitrectomy with blocked artery massage for retinal artery occlusion caused by a visible embolus have been reported.^[2-4] The purpose of surgical intervention is to move the visible emboli to the distal end of the retinal artery with external force. It is rare for the visible embolus to move forward by itself after paracentesis for the patient.

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.

References

1. Lin CJ, Su CW, Chen HS, Chen WL, Lin JM, Tsai YY. Rescue vitrectomy with blocked artery massage and bloodletting for branch retinal artery occlusion. *Indian J Ophthalmol*. 2017;65:323-5.
 2. Matonti F, Hoffart L, Nadeau S, Hamdan J, Denis D. Surgical embolectomy for central retinal artery occlusion. *Can J Ophthalmol* 2013;48:e25-7.
 3. Brunner S, Binder S. Surgical embolus excision in retinal artery occlusion: Two case reports. *Acta Ophthalmol* 2013;91:e652-3.
 4. Almeida DR, Mammo Z, Chin EK, Mahajan VB. Surgical embolectomy for fovea-threatening acute retinal artery occlusion. *Retin Cases Brief Rep* 2016;10:331-3.
-