

A rare and unusual avulsed vessel in a patient with branch retinal vein occlusion

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Abstract: We present a rare and unusual avulsed vessel in a patient with branch retinal vein occlusion (BRVO). Fundus examination of the right eye showed BRVO and a long avulsed vessel. Fluorescein angiography clearly defined an avulsed vessel communicated directly with an inferotemporal branch retinal vein at the optic disc. The coexistence of BRVO and avulsed vessel is extremely rare, to our knowledge this is the first reported case of a patient with such a long avulsed vessel.

Keywords: branch retinal vein occlusion, avulsed vessel.

INTRODUCTION

Avulsed retinal vessels are an uncommon but distinct clinical entity [1-3]. Vitreous attachments to retinal vessels and subsequent traction on the involved blood vessel can result in avulsion of a patent retinal blood vessel [1-3]. In general, the more common avulsed retinal vein consists of an avulsed vessel attached to an operculum overlying a round retinal hole or horseshoe tears [1-3]. Such avulsed retinal veins often cause recurrent vitreous hemorrhage. In contrast, Vine [1] described avulsed retinal veins without retinal breaks in eight patients. Herein, we present a rare and unusual avulsed vessel in a patient with branch retinal vein occlusion (BRVO).

CASE REPORT

A 53-year-old woman was referred for recurrent vitreous hemorrhage in the right eye. She had treated retinal photocoagulation for BRVO at referral hospital. Her best-corrected visual acuity was 1.0 in the right eye and 1.2 in the left eye. The anterior segments and intraocular pressures were normal. Fundus examination of the right eye showed BRVO in the superotemporal area and vitreous hemorrhage in the inferior vitreous cavity. Moreover, a long avulsed vessel (Figure 1 arrows) and the opaque gliotic vitreous band was also detected (Figure 1 arrowheads).

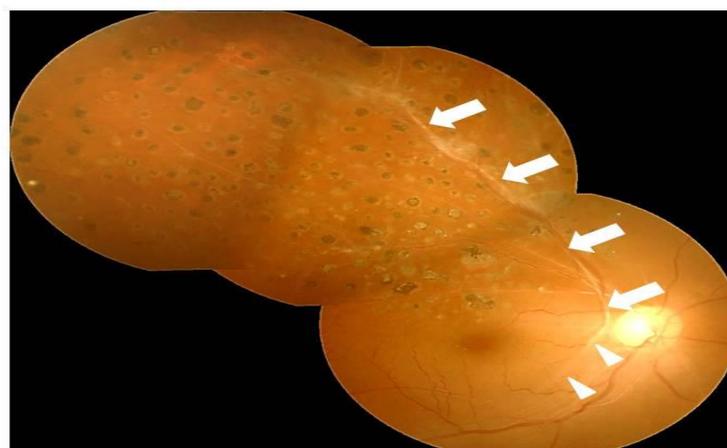


Fig 1: Fundus photograph of the right eye

Note a long avulsed vessel (arrows) and an opaque gliotic vitreous band (arrowheads).

Fluorescein angiography clearly defined an avulsed vessel (Figure 2 arrows) communicated directly with an inferotemporal branch retinal vein at the optic disc (Figure 2 arrowheads).

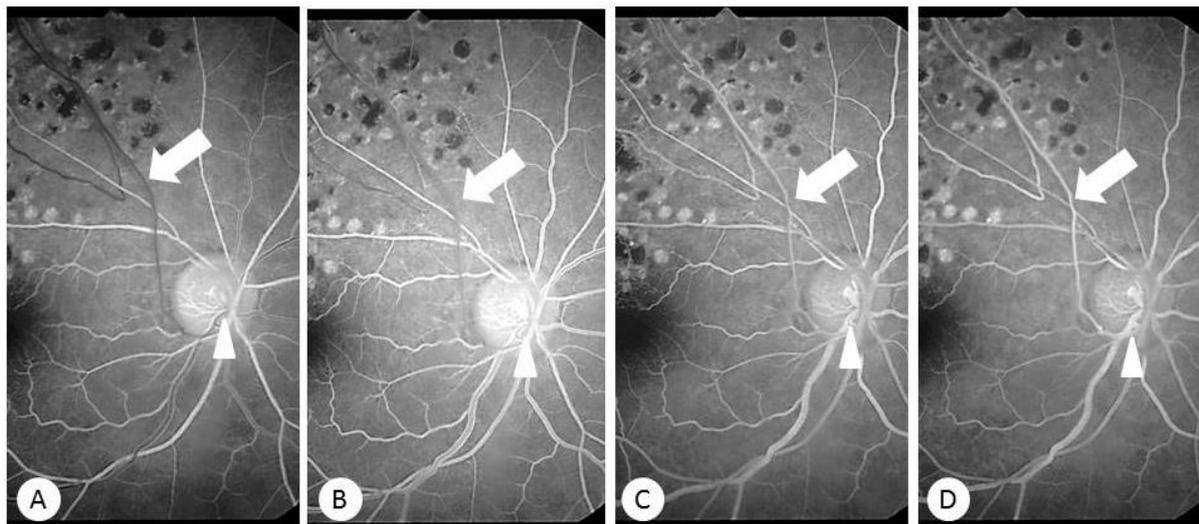


Fig 2: Fluorescein angiography of the right eye

Note an avulsed vessel gradually refluxed directly at the optic disc. Two weeks after the initial visit, vitreous hemorrhage was disappeared and visual acuity improved to 1.2.

DISCUSSION

Avulsed retinal veins without retinal breaks have rarely been reported as a cause of vitreous hemorrhage [1]. Vine [1] described avulsed retinal veins without retinal breaks. According to their report, in six of the eight patients, the avulsed vessels resulted in a vitreous hemorrhage and three of these patients had recurrent vitreous hemorrhages. Moreover, the coexistence of BRVO and avulsed vessel is extremely rare, to our knowledge this is the first reported case of a patient with such a long avulsed vessel. Interestingly, the opaque gliotic vitreous band was detected in this patient. Although it is unknown when this avulsed vessel was formed, we speculate that vitreous hemorrhage might be the result of persistent vitreous traction producing further avulsion of the retinal vessel.

Disclosure

No conflicts of interest are declared in relation to this paper.

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