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CLINICAL IMAGE

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Unilateral Purtscher-like retinopathy as the presenting feature of a case with spontaneous carotid artery dissection

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Abstract

Carotid artery dissection should be considered in the differential diagnosis when a clinician faces with a case presenting with a unilateral Purtscher-like retinopathy.

KEYWORDS

dissection, fluorescein angiography, internal carotid artery, optical coherence tomography, Purtscher like retinopathy

1 | CASE DESCRIPTION

Carotid artery dissection should be considered in the differential diagnosis when a clinician faces with a case presenting with a unilateral Purtscher-like retinopathy.

A 64-year-old man with type 2 diabetes was examined with a severe headache and mild visual acuity decrease in his right eye. On examination, his best-corrected visual acuity was 20/30 in his right eye and 20/20 in the left. While left fundus was normal, there were mostly peripapillary located cotton-wool spots with an intact foveal architecture in his right eye (Figure 1). A diagnosis of right Purtscher-like retinopathy was made. A detailed systemic workup was carried out, and right internal carotid artery catheter angiography demonstrated the presence of the spiral dissection of right internal carotid artery (Figure 2). The diagnosis of Purtscher-like retinopathy is clinical with a presentation that usually includes a sudden unilateral or bilateral visual disturbance of variable severity. It is characterized with several retinal findings, such as cotton-wool spots, retinal hemorrhages, and areas of inner retinal whitening, namely Purtscher flecken. A multitude of various systemic diseases has been described as the cause.[1] Very recently, Qazi et al[2] reported a 40-year-old woman with a unilateral Purtscher-like retinopathy. Two days earlier, she had an ischemic stroke of her middle cerebral artery secondary to a right carotid artery dissection. In our patient, microemboli from the carotid dissection might be the cause for the clinical presentation and the visual acuity, and macular anatomy returned to normal with only medical treatment during the follow-up. Whenever a diagnosis of Purtscher-like retinopathy is made, underlying diseases should be scrutinized meticulously.

ACKNOWLEDGMENT

None. This article was published with written consent of the patient.

CONFLICT OF INTEREST

None declared.

AUTHOR CONTRIBUTIONS

SCI: involved in writing of the manuscript. AY and AOS: involved in the ophthalmological examination and editing of the manuscript. SM: involved in the neuroradiological examination.

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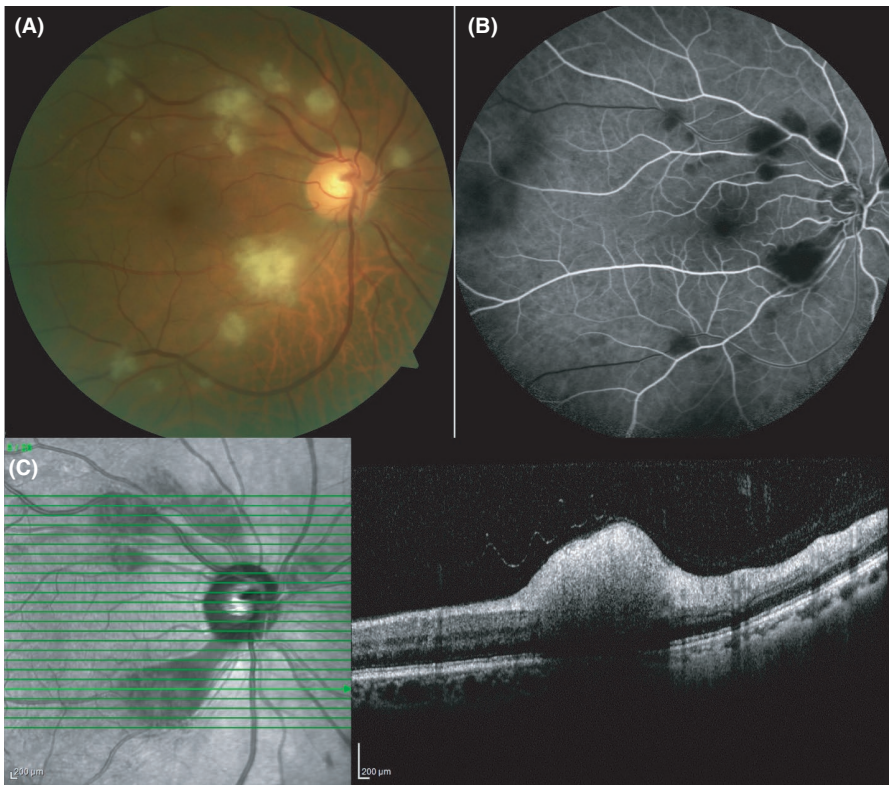


FIGURE 1 Right eye. A, Color fundus picture (DRI OCT Triton; Topcon) showing the mostly peripapillary located scattered cotton-wool spots with notingly normal-looking fovea. B, Arteriovenous phase of fluorescein angiogram (Spectralis; Heidelberg Engineering) depicting the hypofluorescent spots corresponding to the cotton-wool spots. C, Horizontal spectral domain optical coherence tomographic (Spectralis; Heidelberg Engineering) frame through one of the cotton-wool spots delineating the increased reflectivity of the ganglion cell layer

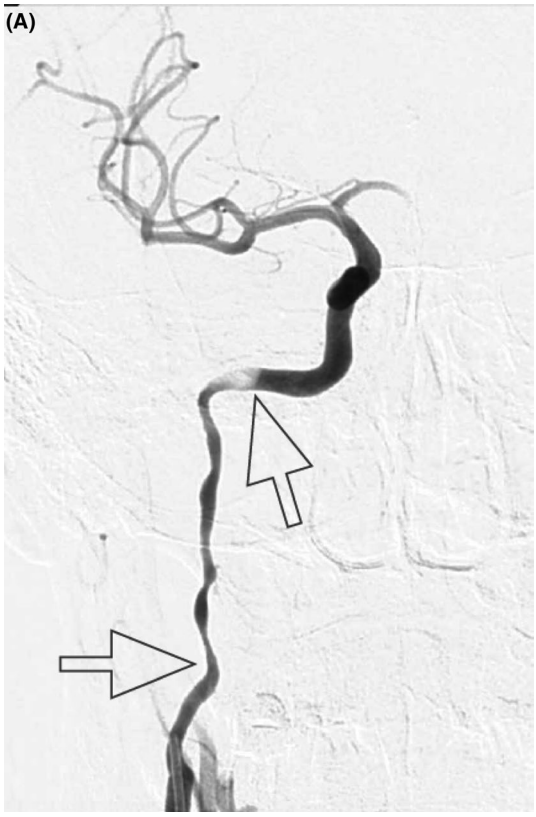


FIGURE 2 Right internal carotid artery catheter angiography shows long segment dissection. The start and end points of the dissection are pointed by the arrows. As the dissected intima follows a spiral route, the true (flowing) lumen shows an undulating pattern

ETHICAL APPROVAL

Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

DATA AVAILABILITY STATEMENT

The datasets used during the current study are available from the corresponding author on reasonable request.

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