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Central Retinal Artery Occlusion Revealing Raynaud's Syndrome

Occlusion de l'artère centrale de la rétine révélatrice d'un syndrome de Raynaud

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A 30-year-old woman, with unremarkable past medical history, presented to our department for vision loss in her left eye (LE). Best-corrected visual acuity of the LE was limited to counting fingers. Biomicroscopic exam was normal. Fundus examination revealed retinal opacity in the posterior pole, cherry-red spot, cattle trucking and diffuse retinal pallor (**Figure 1a**). The diagnosis of central retinal artery occlusion (CRAO) was made. The examination of the right was unremarkable.

Fundus fluorescein angiography of the LE confirmed the diagnosis, showing a delay in the arterial filling at 32 s (**Figure 1b**) and 3 min 35 s (**Figure 1c**). The primary physical examination revealed a Raynaud's syndrome with ex-sanguine fingers, completely insensible, and whiteish yellow color exacerbated by a moderate cold (cold water) (**Figure 1d**).

The patient noticed digital changing color for few months and did not consult a general practitioner. The patient was, urgently, admitted in internal medicine department for an etiological assessment and better management. Central retinal artery occlusion (CRAO) is an ocular emergency, causing typically a profound, acute. painless monocular visual loss. 80% of affected individuals have a final visual acuity limited to counting fingers or worse. CRAO is the ocular equivalent of a cerebral stroke. The clinical approach and the management are relatively similar. The major risk factors of CRAO can be divided into nonarteritic and arteritic factors. CRAO of arteritic etiology is mostly caused by giant cell arteritis. Other vasculitic disorders such as Susac syndrome, systemic lupus erythematosus, polyarteritis nodosa, and granulomatosis with polyangiitis have also been associated with retinal artery occlusion [1].

Raynaud's phenomenon (RP) is a commonly encountered clinical manifestation which may be primary or secondary to underlying disease (Systemic lupus erythematosus, Sjogren's syndrome, Mixed connective...). There is an imbalance between vasoconstricting and vasodilating factors. Physical examination, nailfold capillaroscopy and immunological tests can differentiate primary from secondary RP and subsequently orient the medical care [2].



Figure 1. (a) Fundus photography showing cherry-red spot, cattle trucking and diffuse retinal whitening compatible with a central retina artery occlusion in the left eye. Normal fundus in the right eye (b,c) Fluorescein angiography showing at early sequence (b) delayed arterial filling and confirming at late sequence (c) the arterial occlusion without replacement circulation. (d) Raynaud syndrome: aspect and coloration of fingers after cold exposure.

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Conflicts of interest

Authors do not declare any conflict of interest

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