IMAGE EN OPHTALMOLOGIE

Simultaneous bilateral central retinal artery occlusion following COVID-19 Infection

Occlusion bilatérale de l'artère centrale de la rétine secondaire à une infection par le COVID 19

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Coronavirus-19 disease (COVID-19) has been associated with inflammation-induced multiorgan involvement and hemostatic changes, leading to severe coagulopathy and thrombotic complications [1,2]. Here, we report the case of a patient who developed simultaneous bilateral retinal artery occlusion following COVID-19 infection.

A 53-year-old man, with a history of hospitalization for COVID 19 infection and pulmonary symptoms two months ago, alcoholic and smoker, who consulted on emergency, for a bilateral symmetrical and painless drop vision, evolving for 1 month.

The ophthalmological examination showed visual acuity limited to light perception in both eyes associated to a bilateral mydriasis with a relative afferent pupillary defect. Anterior segment examination was normal. Ocular pressure in both eyes was up to 16mmHg. Fundus examination showed bilateral papillary atrophy, retinal pallor and abnormal foveal reflection (**Figure A**). Fluorescein angiography showed extreme delay in perfusion of the central retinal artery branches and prolonged retinal arteriovenous filling time. The diagnosis of a bilateral central retinal artery occlusion was retained. The cardio-vascular examination as well as the hemostasis and inflammatory work-up were normal. Simultaneous Bilateral Central Retinal Artery Occlusion following COVID-19 Infection was the etiological diagnosis retained. COVID-19 patients may develop a systemic coagulopathy and acquired thrombophilia characterized by a tendency for venous, arterial, and microvascular thrombosis [1,2]. Care should be taken regarding retinal vascular diseases, intraocular inflammation and ophthalmological emergencies in patients with COVID-19.

References

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Conflicts of interest

Authors do not declare any conflict of interest

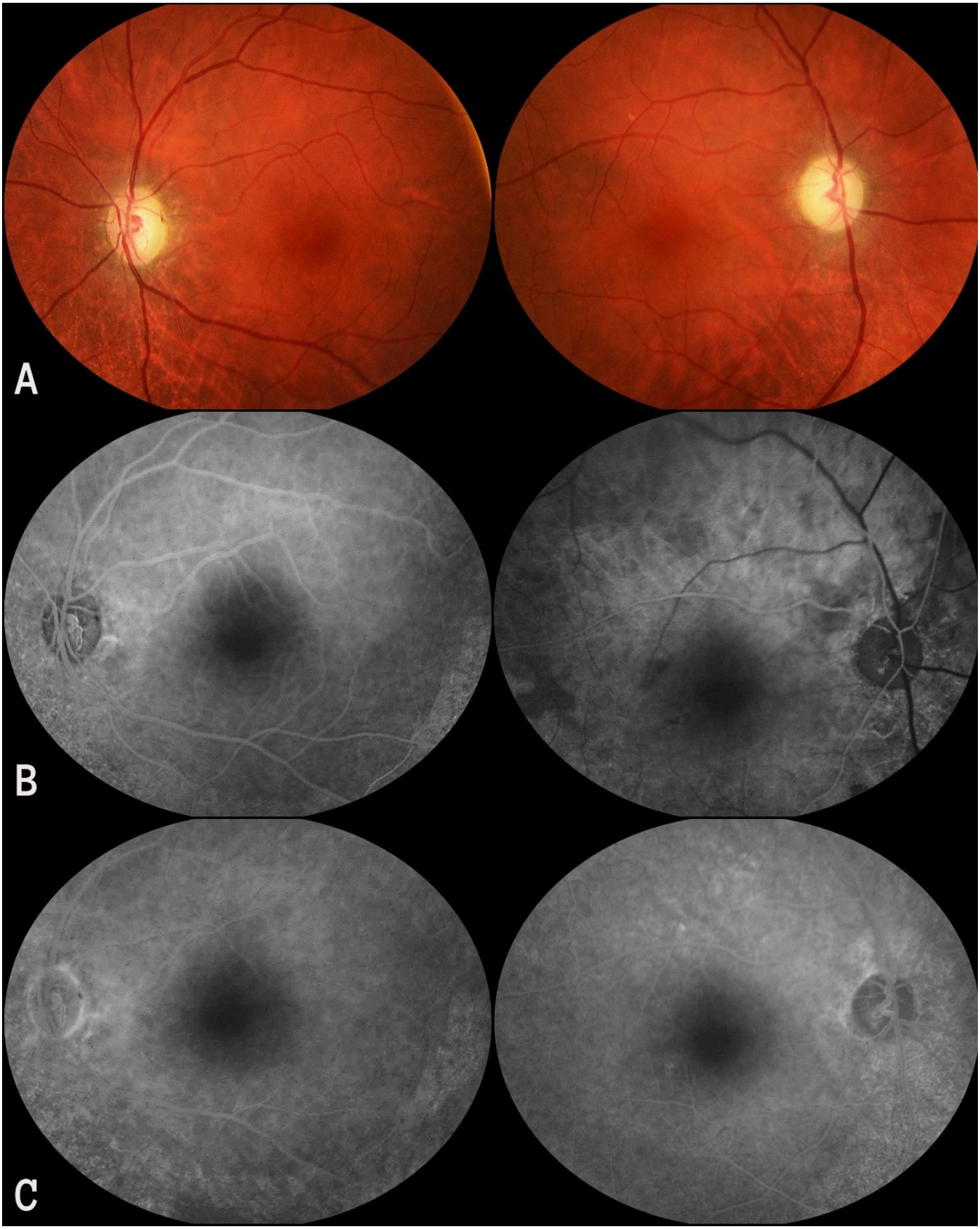

Figure 1. **(A)** Fundus photography showing a bilateral optic nerve atrophy and retinal pallor **(B, C)** Fundus fluorescein angiography showed delayed filing of the retinal artery and prolonged arteriovenous transit time