

Ophthalmic Images

Bilateral Acute Macular Neuroretinopathy After Vaccination Against SARS-CoV-2

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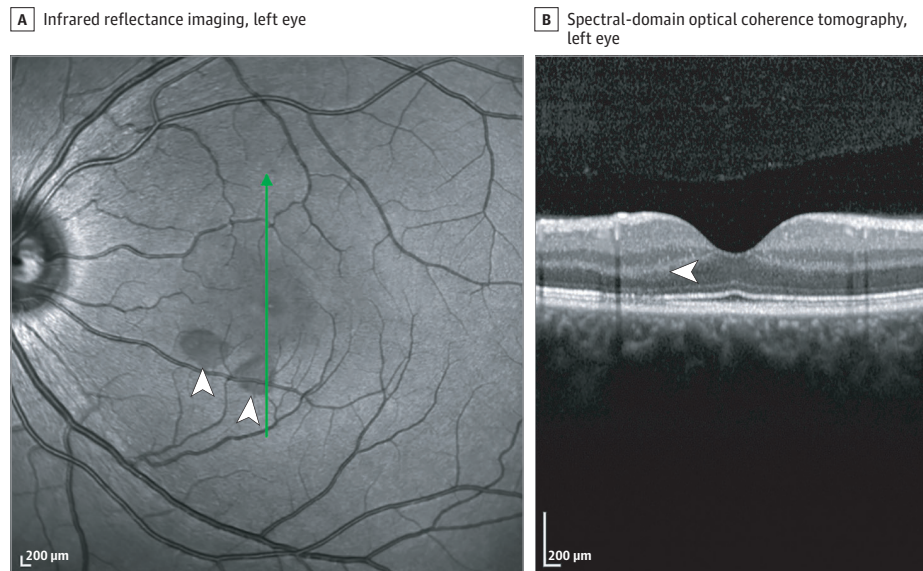


Figure. A, Infrared reflectance imaging of the left eye showing 2 circumscribed lesions (arrowheads). B, Spectral-domain optical coherence tomography of the left eye over 1 lesion showing outer plexiform layer thickening (arrowhead). The vertical green arrow in image A indicates the direction of the optical coherence tomography B scan shown in image B.

A 21-year-old woman in good health (best-corrected visual acuity, 20/16 OU) reported bilateral paracentral scotomas 3 days after receiving her first COVID-19 vaccine (Vaxzevria [AstraZeneca]). Ophthalmoscopy showed bilateral circumscribed paracentral dark lesions that were easily visible on infrared reflectance imaging (Figure, A) and matched with outer plexiform layer thickening and discontinuity of the photoreceptor inner-segment ellipsoid band on optical coherence tomography (Figure, B). Microperimetry demonstrated bilateral scotomas corresponding to these lesions. Bilateral acute macular neuroretinopathy was diagnosed. No additional ocu-

lar, orbital, and cerebral pathologies were found on clinical ophthalmic, neurological, and imaging workups, including magnetic resonance angiography. Apart from birth control use (levonorgestrel and ethinylestradiol), the patient's medical history was unremarkable. Because acute macular neuroretinopathy was recently described in patients with COVID-19,¹ polymerase chain reaction testing for SARS-CoV-2 was performed, with a negative result. Given the idiopathic nature of acute macular neuroretinopathy and the hundreds of millions of people receiving COVID-19 vaccination, conclusions as to causality or direct correlation should not be drawn from this case.

ARTICLE INFORMATION

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REFERENCE

1. Virgo J, Mohamed M. Paracentral acute middle maculopathy and acute macular neuroretinopathy following SARS-CoV-2 infection. *Eye (Lond)*. 2020;34(12):2352-2353. doi:10.1038/s41433-020-1069-8