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when placing GDDs in eyes of young children with glaucoma include the following: (1) leaving extra tubing against the sclera but sewing a “bend” in the tube on the sclera, so there is the possibility of advancing the tube into the anterior chamber further if it should retract with child/eye growth; and (2) aiming the tube almost parallel to the superior (or inferior) limbus rather than radially, and placing the tube as deep as conceivably possible in the anterior chamber (sulcus or pars plana placement requires the tube to be radial, however, so the tube tip remains patent and does not become blocked by overlying iris or too close to the vitreous base in the case of a pars plana placement).

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### ACUTE ABDUCENS NERVE PALSY IN A PATIENT WITH THE NOVEL CORONAVIRUS DISEASE (COVID-19)

*To the Editor:* I would like to highlight a few points pertaining to the recently published “Acute abducens nerve palsy in a patient with the novel coronavirus disease (COVID-19),”<sup>1</sup> which shows that abducens nerve palsy may represent part of the neurologic spectrum of COVID-19. Patients with COVID-19 infection may also have other impairments of extrinsic ocular motility. The case report of a 21-year-old who presented with a third cranial nerve palsy after a severe form of SARS-CoV-2 has been described; after the 7th day, the patient rapidly recovered from his diplopia.<sup>2</sup> SARS-CoV-2 is a neurotrophic virus that can cause increased intracranial pressure, affecting the sixth cranial nerve. Another action of the virus that may explain the alteration of ocular motility and its thrombotic action is venous and arterial circulations.<sup>2,3</sup> Other viruses that can cause changes in extrinsic ocular motility may also shed light on the pathophysiology of SARS-CoV-2. Chikungunya virus, for example, causes the release of

cytokines that have direct and indirect neurotoxic action. Immunohistochemistry techniques have already demonstrated that infected neurons can undergo apoptosis.<sup>4</sup>

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#### REPLY

We thank Dr. Gonçalves dos Santos Martins for his interest in our case report of a previously healthy young man who developed a unilateral abducens nerve palsy in the setting of an acute infection with the SARS-CoV-2 virus.<sup>1</sup> This case highlights the neurologic manifestations that may occur in COVID-19. We appreciate the fact that not only has COVID-19 since been associated with cranial neuropathies, as mentioned by Dr. Gonçalves, but also with other neurologic manifestations, including optic neuritis and Miller-Fisher syndrome.<sup>2</sup> Although various possible mechanisms for neurologic involvement have been proposed, we agree that the possibilities include increased intracranial pressure as well as coagulopathies.<sup>3,4</sup> Additionally, other viruses can also cause cranial neuropathies, including herpes, Chikungunya, and Epstein-Barr virus, and the mechanisms by which these viruses exert their neurologic manifestations may aid our understanding of infections with SARS-CoV-2. Therefore, as our knowledge of the short- and long-term manifestations of COVID-19 increases, we hope that future therapies may limit and/or even prevent these potentially devastating manifestations.

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