

been reported [2]. Comparatively lower incidence has been reported with optic nerve involvement in COVID-19 infected patients. A paper published recently conducted optic nerve analysis of COVID-19 infected patients. Out of 17 patients, 8 patients showed increased optic nerve swelling [11]. A case report described atypical bilateral optic neuritis with myelin oligodendrocyte glycoprotein antibody (MOG-Ab) associated in COVID-19 patient [12]. The hypothesis was that COVID-19 triggered autoimmunity and caused demyelination and subsequently optic neuritis. Our case also fits somewhere here with the probability of inflammation of optic nerves due to infiltration of virus particle or inflammation due to the immunity dysregulation secondary to the viral infection. The low level of vitamin B-12 (methyl cobalamin) occasionally causes optic neuritis [13] but the level in our case was not too low, and the level came to normal quickly with intramuscular supplementation and thus the chance of low vitamin B12 as the culprit in our case is not convincing. The CSF fluid exam was not remarkable, and the Aqp-4 antibody was negative which rules out the possibility of Neuromyelitis Optica. Hence, the possibility of COVID-19 infection causing the retrobulbar neuritis in our patient is high.

Conclusion

Our case highlights the fact that the neurotropism of SARS-CoV-2 virus and the availability of ACE2 and TMPRSS2 receptors should be kept in mind and the possibility of neurological deficit because of its infection to the patient should be included as differential diagnosis.

Acknowledgement

None.

Conflicts of Interest

None.

Author Contributions

AC was involved in conception and design of the study, drafting the article; AC involved in acquisition and analysis and interpretation of the data, revising the article; BP was involved in revision of the data and final approval of the version to be submitted.

Ethical Approval

Informed consent was obtained from the patient regarding the report of his clinical scenario data in an anonymous way.

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