

COVID-19-Related Encephalopathy: A Case Report

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SETTING

Inpatient Rehab Facility

CASE REPORT

An 82-year-old male with hypertension presented with 4 days of altered mental status.

Previously independent, the patient was oriented only to self, with poor command following and comprehension.

Delirium work-up, including non-contrast head CT, electrolyte studies, complete blood count, thyroid studies, urinalysis, B12 levels, and infectious workup, were within normal limits. The patient was found to be positive for COVID-19.

The patient remained stable on room air without respiratory symptoms. However, he continued to show no improvement in mental status.

Thus, the patient was admitted to an acute rehabilitation unit. Further work up, including ammonia levels, electroencephalography, and magnetic resonance imaging of the brain, was negative.

The patient's delirium was ultimately attributed to COVID-19-related encephalopathy. During his 2-week rehabilitation course, the patient's mental status and function gradually improved. Upon discharge, the patient had returned to his functional baseline.

Typical symptoms

Fever

Cough

Anorexia

Diarrhea

Throat pain

Abdominal pain

Nervous system symptoms

Any

CNS

Dizziness

Headache

Impaired consciousness

Acute cerebrovascular disease

Ataxia

Seizure

PNS

Impairment

Taste

Smell

Vision

Typical and Neurological Symptoms of COVID-19¹

DISCUSSION

This case describes a unique manifestation of the COVID-19 infection.

While the prevalence of neurologic symptoms in COVID-19 patients has been estimated to be 36.4%, an even smaller proportion (2.4%) of individuals with non-severe infection experience impaired consciousness.¹

The patient's sole clinical finding was a decline in mental status.

One study showed that older patients with baseline hypertension were more likely to have neurologic symptoms and fewer typical symptoms. Such is the case with this patient.

CONCLUSION

While COVID-19 patients typically present with fever, cough, and shortness of breath, some patients present solely with neurologic symptoms. When patients present with altered mental status in the context of being positive for COVID-19, encephalopathy should be considered.

REFERENCES

1. Mao L, Jin H, Wang M, et al. Neurologic Manifestations of Hospitalized Patients With Coronavirus Disease 2019 in Wuhan, China. JAMA Neurol 2020.