



Recovery Following Rehabilitation In Post COVID19 Associated Demyelination - A case report

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Introduction

- COVID -19 is caused by novel corona virus SARS-CoV-2
- More than 1/3rd of patients develop neurological manifestations ¹
- Demyelination is seen as a complication in severe COVID ¹

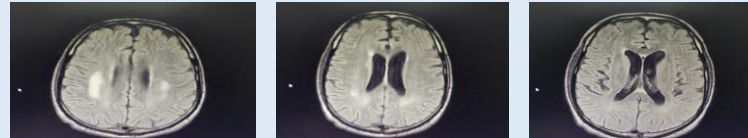
Case Report

- A 47 year old , known Diabetes mellitus, Hypertension, Chronic Kidney Disease tested positive for COVID prior to surgery for bilateral cataract
- Three days later, he had loss of consciousness, dysphagia, global aphasia and weakness of all four limbs.
- Initial CT Brain was Normal.
- He was managed conservatively.
- He was admitted in our department after 1 ½ months. Covid test was negative
- **Functional status:** He is bed- bound; He is taking feeds through Ryle's tube and dependent for all activities of daily living.

Investigations

	Pre dialysis	Post dialysis
S. Sodium	154	134
S. Urea	209.1	69.5
S. Creatinine	2.62	1.20

- MRI Brain- T1 hypointense lesions involving bilateral centrum, semiovale with diffusion restriction

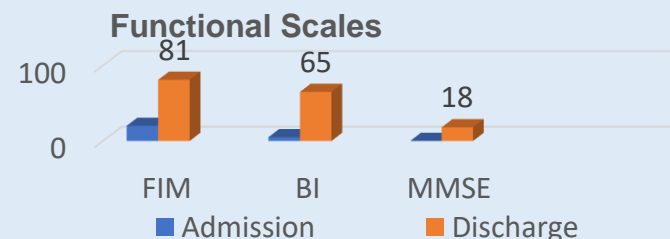


Management

- **Medical management:** Steroids, Memantine and Donepezil
- **Rehabilitation:** Physiotherapy, Occupational therapy and Speech & swallow

Functional status at discharge

- At discharge: **He is walking with walker**



Discussion

- Luca Zenin et al ¹, Agabio Diogenes et al ², Anahita Zoghia et al ³ have reported post-Covid demyelinating lesions in brain and spinal cord.
- However, none of the case reports reported their functional outcomes
- Our patient reported significant improvement in functional status following rehabilitation

Conclusion

- Demyelination is a common post-Covid sequelae
- Most of these cases present with severe functional limitations
- They are likely to benefit from an early comprehensive rehabilitation program.

References

1. Event of the central nervous system following COVID-19Luca SARS-CoV-2 can induce brain and spine demyelinating lesions
2. Agábio Diógenes Possible acute multifocal demyelinating lesions in a COVID-19 patient Possíveis lesões desmielinizantes multifocais agudas em um paciente com COVID-19
3. Anahita Zoghia A case of possible atypical demyelinating