Background We present a 25-year-old woman with a background history of Multiple sclerosis (MS) on Ocrelizumab who presented with symptoms of meningoencephalitis. She initially presented with a 2-day history of worsening occipital headache, neck stiffness and photophobia. She had symptoms of Hand Foot and Mouth disease (HFMD) 2 weeks prior to this presentation.

Investigation and treatment progress

- The first CSF study performed was positive for enterovirus within the CSF. However, enterovirus DNA was negative in the second CSF PCR study and was only found to be positive when the study was repeated using a nested PCR technique.
- MRI scans showed symmetrical FLAIR hyperintensities within both thalamus and a non-enhancing signal abnormality within the left splenium of the corpus callosum.
- The use of IVIG was considered but was held off as the patient's conditioned improved rapidly with supportive therapy.

Teaching Points

- Cases of enterovirus encephalitis in adults have been reported among patients receiving other B cell depleting therapy such as rituximab but has never been described in patients on Ocrelizumab which is also a B cell depleting agent.
- Unusual opportunistic infection should be considered in patients on B cell depleting therapies despite having a normal IgG level. Furthermore, more sensitive PCR techniques such as a double nested PCR may need to be employed to confirm the diagnosis of opportunistic infections.

2677 CEREBELLAR DYSFUNCTION POST COVID INFECTION

Samuel Kwok*, Jessica Jia, Sameen Haque. *Nepean Hospital, Penrith, NSW, Australia*

10.1136/bmjno-2023-ANZAN.86

Background

- Since the emergence of SARS COVID-2 which resulted in a global pandemic infecting million, post-COVID encephalitis is an increasingly recognized entity.
- The current literature reports cases with brainstem, limbic and cerebellar involvement with good correlation with radiological findings.
- We report a case of post-COVID seronegative autoimmune encephalitis with predominant cerebellar dysfunction in a 19-year-old university student with radiological findings involving the temporal lobe and thalamus.

Investigations and treatment progress

- Serum and CSF investigations confirmed to diagnosis of COVID upper respiratory tract infection (URTI). However extensive serum and CSF screen for autoimmune encephalitis was negative for any antibodies.
- MRI scan showed FLAIR hyperintensities within the temporal lobe, thalamus, pons and cerebellar region.
- He was treated with pulse methylprednisolone and prolonged steroid wean with excellent response.

Goals and learning points of this presentation

- Neuroimaging is an important tool in the diagnosis of autoimmune encephalitis as there may be more extensive involvement beyond the initial clinical presentation.
- Antibodies may be negative in COVID related encephalitis. Hence the diagnosis can be made based on clinical presentation and neuroimaging.
- Steroids can be an effective immunosuppression therapy which should be considered when managing patient's with COVID related encephalitis.

2678 MYASTHENIA GRAVIS TREATMENT IN A TERTIARY MELBOURNE HOSPITAL – A DESCRIPTIVE RETROSPECTIVE AUDIT

Matthew Megens*, Wen Wen Zhang, Edrich Rodrigues, Mahima Kapoor. *Alfred Health, Melbourne, VIC, Australia*

10.1136/bmjno-2023-ANZAN.87

Objectives Intravenous immunoglobulin (IVIg) and plasma exchange (Plex) are used to treat exacerbations of myasthenia gravis (MG) in inpatients. There is limited evidence of superiority of one modality. We aimed to compare the time to improvement in disease severity and duration of improvement between patients receiving IVIg or Plex for an exacerbation of MG.

Methods We retrospectively identified patients admitted with an exacerbation of MG over a 10-year period. We measured disease severity by the Myasthenia Gravis Foundation of America (MGFA) clinical classification and defined improvement as an increase in 1 Class of MGFA. We calculated the time to improvement from the start of treatment.

Results We identified 31 patients (22 females; median age 62.5 years) with generalised MG who had 48 admissions. 38 patients received IVIg first-line and 10 received Plex; 7 patients received both. 2 admissions were for ocular weakness (Class 1 in MGFA), mild weakness: 29 (Class 2a/2b), moderate weakness: 16 (Class 3a/3b), severe weakness: 5 (Class 4a/4b), intubated: 2 patients (Class 5). There was no significant difference in number of days to improvement with either treatment (median for both groups 3.0 days, $p > 0.05$). Median length of stay in hospital was 7.5 days. 9/19 patients treated with IVIg and 5/9 patients treated with Plex and inpatient at day 7 had persistent improvement in MGFA Class.

Conclusion Onset of improvement in disease severity and stability at day 7 do not differ significantly in patients treated with IVIg or Plex for an acute exacerbation of myasthenia gravis.

2680 SPINAL NERVE ROOT BIOPSY TO DIAGNOSE PRIMARY NEUROLYMPHOMATOSIS. A CASE REPORT

[1]Sangruthai Sriweerawanidchakun*, [2]Samantha Saunders, [3]Samantha Giang. *[1]St. Vincent's Hospital, Epping, NSW, Australia*; *[2]General Medicine, Gosford Hospital, Gosford, NSW, Australia*; *[3]General medicine, Concord Hospital, Concord, NSW, Australia*

10.1136/bmjno-2023-ANZAN.88

Introduction Primary neurolymphomatosis is the direct infiltration of lymphomatous neoplastic cells into the nerve roots and/or peripheral nerves and is the first manifestation of an underlying haematological malignancy. The natural history, management and prognosis of the condition are not well understood, given its rarity.