Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Electrodiagnostic study (EMG/NCS) was performed 3 times (on 3rd day from symptom onset, after first and second IvIg course). First EMG/NCS showed severe axonal motor and sensory neuropathy in legs, mild motor axonal damage in arms with massive spontaneous activity in all examined muscles. After repeated IvIg courses NCS in arms become normal, in legs tibial and peroneal MUAP remained absent, sural SNAP became normal; EMG showed slight evidence of reinnervation process without signs of active denervation.

Conclusion. ISCLS can be considered in patients with rapidly progressive axonal polyradiculoneuritis with autonomic signs.

doi:10.1016/j.clinph.2021.11.039

HP42: EMG is a potential biomarker for myositis in patients with antisynthetase syndrome without muscle symptoms—M. Ozaki [a], T. Mano [b], N. Iwasa [a], N. Iguchi [a], A. Kido [b], K. Sugie [a] ([a] Department of Neurology, Nara Medical University, Japan, [b] Department of Rehabilitation, Nara Medical University, Japan)

Anti-aminoacyl-tRNA synthetase (ARS) antibodies positive patients sometimes present interstitial lung disease (ILD) without muscle symptoms. We investigated needle electromyography (nEMG) to explore whether there are some myogenic changes or not in patients with antisynthetase syndrome without muscle symptoms.

Method: We enrolled three patients who fulfilled anti ARS antibodies positive and ILD of the Connor's criteria for antisynthetase syndrome, and not fulfill the PM/DM criteria. We investigated the nEMG, and magnetic resonance imaging (MRI) of muscles to explore whether there are some myogenic changes or not. Serum creatine kinase (CK), manual muscle testing of 8 muscle groups (MMT8), Inclusion Body Myositis-Functional Rating Scale (IBM-FRS) were measured. This study was approved by the ethics committee of the Nara Medical University School of Medicine.

Results: All subjects were females and their ages at the examination were 54 years old (P1), 44(P2) and 69(P3). P1 and P2 had already initiated oral steroid therapy. Although all three patients had no high serum CK level nor decline in IBM-FRS, nEMG revealed that abnormally short durations of the motor unit potential (MUP) patterns in the deltoid and biceps. P3 presented the same MUP pattern in vastus lateralis. MRI revealed inflammatory changes in P2 at left triceps and P3 at anterolateral femurs and posterolateral lower legs.

Conclusion: nEMG is usually performed when patients exhibit muscle weakness, but this examination tool can be applicated to detect muscle damage in patients with anti-ARS antibody-associated ILD, prior to muscle weakness, myalgia, and declines in ADLs.

doi:10.1016/j.clinph.2021.11.040

HP43: Electrophysiological reactions to intraoperative irritation of the optic nerve: A clue for intraoperative optic nerve mapping?—E. Levin, R. Kiselev, A. Vasyatkina, P. Semin (Meshalkin National Medical Research Centre, Russian Federation)

Intraoperative control of optic nerve function preservation during neurosurgical operations currently relies mainly on monitoring of visual evoked potentials. Unfortunately, they detect peril only when the visual pathways are already compromised, sometimes irreversibly. In contrast, electrophysiological stimulation mapping of the nerves can be a fully preventive measure. However, direct sensory nerve mapping requires the patient to be awake during surgery, which is hardly feasible for surgeries targeting the optic nerve area. Another possible approach to sensory nerve mapping involves unconditioned electrophysiological responses evoked by sensory nerve stimulation. The necessary prerequisites for this approach are existence and stability of such responses for a particular sensory nerve in conditions of surgical anesthesia.

Case report. A 52-year-old woman presented with meningioma in the area of right optic nerve and chiasm. She underwent microsurgical removal of the tumor through a transciliary supraorbital approach. Total intravenous anesthesia with propofol was used throughout the surgery. During the surgery, electrodes at the inferior margin of the right orbit repeatedly recorded electrophysiological reactions following touches, tractions and releases of tractions of the right optic nerve by the surgical instruments.

Conclusions. The observed reactions suggest that either the unconditioned blink reflex or antidromic electroretinographic response to optic nerve irritation was conserved under the total intravenous anesthesia. This observation might be of value for development of intraoperative optic nerve mapping. This in turn could increase patients safety by identifying the optic nerve location without negative impacts on it.

This report is accepted for publication in the Neurochirurgie journal: https://doi.org/10.1016/j.neuchi.2021.03.014.

doi:10.1016/j.clinph.2021.11.041

HP47 : Post covid optic neuritis,Egyptian two case reports—A. Hussein, A. Elgohary (Professor Clinical Neurophysiology, Egypt)

The exact incidence of neurological complications from coronavirus disease 2019 (COVID-19) infection remains unknown. Neurological symptoms are more common with severe form of the disease. Through neuro-invasion, the virus can affect both neurons and glial cells and induce wide range of neurological pathologies.

CNS symptoms is commoner representing 91% of all neurological patients with 9% only with PNS.

PNS manifestations showed variable results where visual impairment and nerve pains were more frequent in the severe COVID-19 category of patients.

This is a 2 case report study of post covid optic neuritis , both after severe covid infection and hospitalization ,they developed acute onset visual affection mostly1.5 month in the first case and 2 month in the second one after almost complete cure.

The first case had monocular delayed perception of vision , the second one had complete visual loss of one eye of unexplained causes.

All neurological and ophthalmological investigations were normal apart from visual evoked potentials that showed small amplitude p100 response in the first case and absent response in the last one.

This supports a study Based on murine models of other CoVs, stated that viral-induced optic neuritis secondary to autoantibody production against neuroretina should also be included in the differential diagnosis and infected patients should be monitored for signs of neuroretinal degeneration in the long term.

doi:10.1016/j.clinph.2021.11.042