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Background and aims

To assess how COVID-19 impacted the clinical practice specialized SCI units.

Methods

Survey circulated to the personnel of specialized SCI centers in Italy.

Results

Two hundred people answered the survey. Most of them (63%) reported that during the last year there has been a reduction of the number of new SCI and a reduction of the number of beds available for patients with SCI. In 68% of the centers patients with SCI and COVID were admitted, but mostly (47%) after a negative swab. In all units COVID screening is regularly performed. Almost all the visit of relatives to the patients were suspended. Despite all these precautions, 52% of the respondents reported that some patients were found positive during their stay in the unit. Most of them (58%) (depending on the clinical situation) were transferred to COVID units. 95% of the respondents reported that the precautions adopted against the virus changed working modalities, halting some aspects of the clinical practice (e.g. outdoors activities, formal meetings with the relatives, caregivers training, evaluation of architectural barriers at patients home) and causing an increased length of stay, also due to the difficulties to transfer the patients to nursing home, and to the difficulties experienced by the patients to obtain all the necessary equipment. However, none of the respondents reported an impact on patients outcomes, especially in daily living independence.

Conclusions

The outpatients activities have been impacted too and this reflected in an increase of complications related to SCI, in particular pressure ulcers, pain, spasticity, anxiety and depression.

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119862**A case of neuromyelitis optica spectrum disorder (NMOSD) and acute myositis following SARS-CoV-2 infection**

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Background and aims

Neurological manifestations of COVID-19 have been described. We report a case of seropositive NMOSD and acute myositis following SARS-CoV-2 infection.

Methods

A previous healthy 35-years old man was admitted for NORB, a month after paucisymptomatic SARS-CoV-2 infection. Nasopharyngeal tests for SARS-CoV-2 was negative and serological IgG and IgM were positive. The neurological examination showed left eye blindness and myalgia. Blood examination showed elevated CK (>1000 UI/l), positive ANA (1:640) and anti-TPO (>1300 U/ml). Brain MRI showed T2/FLAIR left optic nerve hyperintensity with contrast enhancement. The EMG revealed signs of acute myogenic damage. He received intravenous methylprednisolone with poor recovery on vision but full recovery on muscle symptoms. Four months later he present NORB in contralateral eye; MRI showed optic chiasm hyperintensity, serum anti-AQP-4-antibodies were positive, EMG and CK were normalized. The patient received intravenous steroids and Immunoglobulins and started rituximab. Nevertheless, three

months later he developed the area postrema syndrome, he was retreated with intravenous steroids and immunoglobulins and achieved a complete recovery. In March 2021, he underwent the second course of rituximab with clinical and radiological stability.

Results

The patient was diagnosed with seropositive NMOSD, presented with recurrent NORB and area postrema syndrome, associated to acute myositis and autoimmune thyroiditis after SARS-CoV-2 infection.

Conclusions

We supposed that SARS-CoV-2 may cause a post-infectious autoimmune response directed against AQP4 and other target (the muscle, the thyroid gland). Post-infectious autoimmunity is a potential mechanism in a subset of patients with COVID-19-related neurologic disease. Further research is needed to clarify this association.

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119863**The impact of the COVID-19 pandemic on children and families undergoing epilepsy surgery**

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Background and aims

The COVID-19 pandemic has had a significant impact on how healthcare is delivered to patients with epilepsy. Epilepsy surgery is a strategy with high reported satisfaction rates but can be a stressful road for patients. We aimed to determine significant challenges faced by the families of children undergoing epilepsy surgery during the pandemic.

Methods

Cross-sectional study that included pediatric patients that underwent epilepsy surgery at Children's Hospital/LHSC comparing two groups. We collected data at follow-up using a pre-specified questionnaire asking to evaluate difficulties on a scale of 0–4. Questions focused on seizure activity, concerns over procedure delay, changes in hospital regulations, fear of exposure to COVID-19 and virtual appointments.

Results

Thirty-five surgeries were planned from March 2020 to February 2021, but only 12 (34%) were performed (60% decrease vs. 2019). Out of the 12 families, 11 answered the survey. The most challenging aspect was ongoing seizure activity while waiting for surgery expressed by 10/11 families. Four caregivers ranked it as considerably/extremely challenging. Limitations in the number of allowed-in-hospital visitors were deemed significantly? Extremely challenging by 5/11 (45%), and fear of being exposed to COVID-19 was low in 6/11 (54%) families. Two families reported extreme challenges while telemedicine consults.

Conclusions

These findings show how the pandemic impacted epilepsy surgery patients. The number of surgeries was reduced considerably throughout the pandemic, with sub sequential increased seizure activity and emotional burden on patients. Parents with no additional support expressed the most challenges but felt safe with the implemented COVID-19 measures. Most families were comfortable using telemedicine protocols. Limitations include a small sample size.

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