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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.

Conclusion: Our results indicate that different patterns of time-frequency and normalized power can be found in right temporal spikes of different epilepsy etiologies. Future testing on larger populations will be needed to determine the accuracy of these findings.

TH-289. Evaluation of ictal EEG Source Imaging with sliding window approach to localize the epileptogenic focus

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Introduction: We assess the performance of ictal EEG Source Imaging (ESI) using a sliding window approach to localize the epileptogenic zone (EZ).

Method: Fifty patients from the Epilepsy Database Unit Filadelfia Epilepsy Hospital (Denmark, n=50) were included in the study. At 1-year post-operational follow-up, 76% (25/33) patients with temporal lobe epilepsy (TLE) and 29% (5/17) cases with extra-temporal lobe epilepsy (ETLE) surgical outcome were seizure-free. EEG data was recorded with 25 channels and 19 electrodes of 10-20 setup along with the electrodes F9/10, T9/10 and P9/10 were used. An expert electrophysiologist marked 87 electrographic seizure onsets. The analysis starts from -2 seconds to +5 seconds after the onset and applies ESI in every 2-second sliding window with 1 second overlap. In each 2-seconds time bin, time frequency analysis is performed to select up to two islands of activation. Then, the power distribution of the TF islands over the channels is calculated to construct the topography. Finally, ESI analysis of these topographies is performed. Afterwards, the results were interpreted by expert neurophysiologist and were compared to EZ derived from the post-operated MRI at sublobar-level. Based on the known surgical outcome after 1-year follow-up, the performance was quantified by calculating the sensitivity, specificity, and accuracy to localize the EZ over all-seizures of all patients. Furthermore, the results of histopathology were reported at both seizure- and patient- levels. We assessed the performance at patient-level, where all seizures had to pinpoint to the resection site in patients who were rendered seizure-free after surgery to be considered as a true-positive.

Results: At seizure-level, the proposed method reached a sensitivity, specificity, and accuracy of 79%, 49%, 66% for all-seizures, 84%, 44%, 71% for TLE-seizures and 60%, 52%, 55% for ETLE-seizures, respectively. At patient-level, however, the sensitivity, specificity and accuracy were 75%, 44%, 64% over all patients, 80%, 38%, 70% for the TLE-patients and 57%, 50%, 53% for the ETLE-patients. In terms of histopathology, the sensitivity, specificity, and accuracy were 81%, 23%, 72% over all seizures and 86%, 17%, and 78% over all-patients.

Conclusion: The results show the potential of ictal EEG source localization with the sliding window approach to study the spatial and temporal propagation of the ictal activities and to localize the EZ in presurgical evaluations. The results indicate that the pipeline also work in the more complex ETLE cases.

TH-290. 'Kriya yoga', an easily deliverable tool for stress management among health care workers: Presenting electroencephalographic evidences

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Introduction: Abounding physical and mental exhaustion among the health care workers (HCW) during COVID-19 pandemic rekindled the need to acknowledge the psychological impact of this unprecedented stressful situation on the first-line warriors. The rising stress among the HCW during COVID duties for many months could have long-term effects on their personal and professional life. The situation necessitated presenting a feasible solution which can positively impact mental health. Patanjali's 'Kriya yoga' amalgamates several relaxation techniques, inclusively breath modulation, pranayama, mantra chanting, and asana holding, with a potential for stress management. The effects of 'Kriya Yoga' on EEG and perceived stress among the HCW were investigated.

Methods: Participants were recruited through digital advertisements. Those meeting the eligibility criteria were enrolled in either intervention or control groups. The complete set of 'Kriya yoga' was taught to the subjects in the intervention group by a yoga expert. It included a set of six techniques comprising Breath awareness (Ana pana), Complete breath, Anulom Vilom (Alternate nostril breathing), Om chanting, Gayatri Mantra, and Shavasan (Deep Relaxation). The participants were required to practice it for a period of 6 weeks.

Results: Data for EEG, electrodermal activity (EDA), perceived stress scale (PSS) scores and depression, anxiety and stress scores were collected at different time points. EEG was quantitatively (QEEG) analyzed for delta, theta, alpha, and beta power over several regions. We found improvement in the DASS-21 and PSS scores at the end of the practice sessions. The mean power for alpha frequency was increased in the frontal, central, and parietal regions, and for delta range was raised over the central and parietal areas. The tonic skin conductance level revealed a reduction in stress among the practitioners. The participants reported a subjective feeling of calmness, well-being, and ease of practice.

Conclusion: 'Kriya yoga' is an easily deliverable intervention for stress mitigation among the HCW. It leads to relaxation, a decrease in anxiety, and a reduction in perceived stress. The long-term psychophysiological effects of Kriya yoga practice are depicted by the changes in the power of brain waves and EDA. The proposed intervention can be a model for the mental health well-being of the HCW in stressful circumstances.

TH-291. A Study on periodic epileptiform discharges at university hospitals Coventry and Warwickshire, UK

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Introduction: The aim of this study is to make a review of the periodic EEG patterns, emphasizing the importance of their recognition and clinical significance. Periodic epileptiform discharges are an uncommon EEG pattern. They are defined as repetition of a