detected (~30%), with subdural more common than extradural hemorrhages. The odds of having an ICH was significantly higher with instrumental delivery (3.75%). Conclusions: This shows that prevalence of ICH is relatively high in symptomatic children. Measured prevalence varies according to the type of modality used for screening.

Clinical Neurophysiology (CSCN)

Epilepsy and EEG

P.049

Acetazolamide use for myoclonus: case report of 2 patients with progressive myoclonic epilepsy and literature review

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Background: Cortical myoclonus originates at cerebral cortex, predominantly occurring on voluntary movements. Few case reports described usage of Acetazolamide (ACZ) for myoclonus. Methods: Chart review of 2 patients was performed. Literature review was conducted on myoclonus and ACZ using Pubmed. Results: 22-year-old female was diagnosed with Progressive Myoclonic Epilepsy (PME) secondary to a KCNC1 mutation. Her symptoms started at 10 years old with bilateral tonic clonic seizures (BTCS), later developing progressive ataxia and myoclonus, involving face and limbs, which worsened with stimulus and menses. Medications included Perampanel, Clonazepam and Levetiracetam, however myoclonus was still limiting. At the age of 19, ACZ 250 mg BID was started for 2 weeks around her menses. Follow up revealed significant improvement of myoclonus, resulting in better ambulation, balance and speech, sustained 2.5 years after. 67-year-old male presented BTCS at the age of 53 along with cortical myoclonus, dementia and ataxia, leading to diagnosis of PME with a mutation on IRF2BPL. Improvement of myoclonus occurred with ACZ 250 mg BID biweekly, although balance and cognition still deteriorated. Conclusions: Previous literature outlines 4 cases of action myoclonus that responded to ACZ. We believe that ACZ should be considered to treat myoclonus, especially in cases with cortical involvement and hormonal fluctuations.

P.050

Spike source localizations between the three non-REM sleep stages: resemblances to wakefulness and distinctions from REM sleep

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Background: Sleep-wake states (SWS) affect the expression of interictal epileptiform discharges ("spikes"), which affects resultant source localization calculations used in epilepsy evaluation. We hypothesize that spike localizations from non-REM sleep 1-3 are most concordant with one another. Methods: We used Standardized low-resolution brain electromagnetic tomography (sLORETA) in Curry 8 software to calculate source localization voxels of spikes in N1-3, REM, or wakefulness (W). We assessed voxel concordance between N1-N2-N3/N1-N2-W/N1-N3-W/N2-N3-W/REM-N1-N2/REM-N1-N3/REM-N2-N3/REM-N1-W/REM-N2-W/REM-N3-W. We classified concordances into those containing and not containing a SWS (e.g. N1 vs. not-N1 = N1-N2-N3/N1-N2-W/N1-N3-W/REM-N1-N2/REM-N1-N3/REM-N1-W vs. REM-N2-W/REM-N3-W/REM-N2-N3/N2-N3-W) for comparison. Results: Concordances did not differ for N1-3 or W. However, concordances with REM were lower than those without REM as a fraction of source localization space (median 32.1% vs. 56.1%, $p<0.001$) and cortical grey matter (median 20.4% vs. 27.3%, $p=0.003$). Conclusions: As expected, source localizations from spikes in N1, N2, and N3 did not significantly differ from one another because these three states are constituent members of non-REM sleep. Surprisingly, however, source localizations derived from awake spikes – not a constituent of non-REM sleep – also did not differ. In contrast, REM was most different by reproducibly exhibiting the least three-way concordance. These findings reinforce the unique localizing ability of REM sleep.

Movement Disorders

P.051

Parkinson's disease tremor can show entrainment and distractibility with tapping test

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Background: Electrophysiological tests such as the tapping test are used to distinguish functional and organic tremors, in which patients with functional tremor commonly show entrainment and amplitude reduction (>50% decrease relative to baseline) of contralateral tremor during tapping. While these features are suggested to be specific to functional tremor, the tapping test in Parkinson's disease (PD) tremor has not been tested. Methods: We evaluated 18 PD patients (2F, age 64.17±7.30 [mean±SD] years) with rest and postural tremors using surface electromyography and triaxial accelerometry. Patients were recorded while tapping at 1, 3 and 5 Hz with the contralateral arm at rest or outstretched. Tremor amplitude and frequency were calculated using power spectrum analysis from accelerometer recordings. Results: Reduction of rest tremor amplitude was observed in 3/18 patients during 1 and 3 Hz tapping. Reduction was seen in 3/16 and 1/16 patients with postural tremors at 1 and 3 Hz tapping, respectively. Frequency shifts (>1.5 Hz) were observed in 3/18 rest tremors and 6/16 postural tremors. Seven patients exhibited rest and/or postural tremor entrainment during 3 or 5 Hz tapping. Conclusions: Distractibility and entrainment can be found in PD