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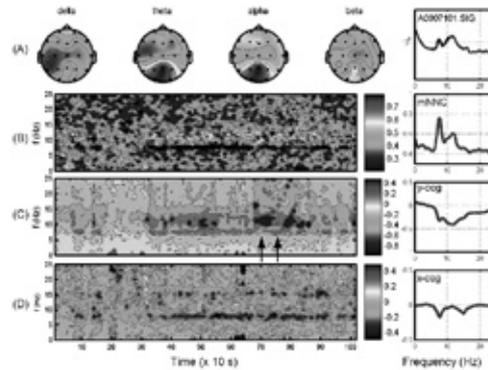
EEG FINDINGS IN POST-STROKE SEIZURES: AN OBSERVATIONAL STUDYU. Yaqub², M. Siddiqui¹, A. Bano², A. Malik¹, F.S. Khan¹, K.A. Siddiqui¹¹Department of Neurology, Liaquat National Hospital, Karachi, Pakistan, ²Department of Clinical Neurophysiology, Liaquat National Hospital, Karachi, Pakistan**Background:** We conducted an observational study in a tertiary referral centre to describe different EEG findings in patients who developed seizures after stroke.**Methods:** We reviewed all EEGs that were performed for evaluation of seizures after stroke over one year. We retrospectively recorded demographic data, side of stroke, type of seizures and EEG findings.**Results:** A total of 41 patients with post stroke seizures had EEGs done at our laboratory which were reviewed and analyzed. Of these patients, 51.2% (n=21) were males (mean age 60.7; range 22–84 years) and 48.8% (n=20) were females (mean age 63; range 3–90 years). The commonest seizure semiology was generalized seizure in 56.1% (n=23), focal seizure in 36.6% (n=15) and focal with secondary generalization in 7.3% (n=3) of patients. 51.2% (n=21) of patients had right hemispheric involvement, 26.8% (n=11) had left hemispheric involvement and in 22% (n=9) of patients the side of stroke was not identified. The commonest EEG finding was generalized slow waves seen in 39.0% (n=16) patients. Other abnormalities found were focal slowing in 19.5% (n=8), focal sharp and slow waves in 9.8% (n=4), focal spikes & slow waves in 4.9% (n=2), focal sharp waves in 4.9% (n=2) of the patients. Focal spike waves in 2.4% (n=1) and PLEDS were seen in 2.4% (n=1) of patients. 17.1% (n=7) of patients had normal EEG.**Conclusion:** Post-stroke seizures are a common entity particularly in the elderly. Generalized seizures and generalized slowing on EEG are the commonest findings in our patients who develop seizures after stroke. The commonest epileptiform discharges were focal sharp and slow waves seen in 9.8% of patients with post stroke seizures.

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THE COLORFUL BRAIN: COMPACT VISUALISATION OF CLINICAL EEG

M.J.A.M. Van Putten

Department of Neurology and Clinical Neurophysiology, Medisch Spectrum Twente, Enschede, The Netherlands

Background: We present a method to transform routine clinical EEG recordings to an alternative visual domain. The method supports the classical visual interpretation and facilitates communication about relevant EEG characteristics.**Methods:** EEG features comprise colour-coded time-frequency representations of two novel symmetry measures and a synchronization measure, based on a coherence estimate. This triplet captures three highly relevant aspects of the dynamics of the EEG background pattern. It visualizes the spatio-temporal distribution of the EEG power in the antero-posterior and lateral direction, and short-distance coherence.**Results:** The potential clinical utility is illustrated by application to various EEGs, including seizure activity and the transition to sleep. A transformation of a normal EEG recording is presented in the figure.**Conclusions:** Quantitative analysis of clinical EEG to alternative domains assists in the interpretation and contributes to an objective interpretation.

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COMPARISON OF STIMULATED SKIN WRINKLING WITH INTRAEPIDERMAL NERVE FIBRE DENSITY AND NERVE CONDUCTION PARAMETERS IN PATIENTS WITH POLYNEUROPATHYE.P. Wilder-Smith¹, T. Aravinda Kannan², A. Chow¹¹Department of Neurology, National University, ²Department of Neurology, National University Hospital, Singapore**Background:** EMLA induced stimulated skin wrinkling (SSW) is a function of small nerve fibre relayed vasoconstriction. Little is known about the relation of SSW with intraepidermal nerve fibre density (IENFD) and other nerve function tests.**Aim:** To the study correlation of two measures of small fibre function, SSW and intraepidermal nerve fibre density (IENFD) with parameters of nerve conduction and monofilament testing in polyneuropathy.**Methods:** Patients with clinical diagnosis of polyneuropathy were prospectively recruited at the National University Hospital, Singapore. Inclusion criteria was a clinical diagnosis of polyneuropathy. Standardised SSW of digit-5 was performed and graded (scale from 0–4). IENFD was obtained from hypothenar skin using PGP 9.5 immunohistochemistry. Monofilament and nerve conduction was performed for the ulnar and sural nerve.**Results:** Tests were performed in 78 patients (mean age 56 yrs, range 20–88). Neuropathy etiology included diabetes mellitus, renal failure, alcohol, idiopathic small nerve fibre disease, and acute inflammatory polyneuritis. Pearson correlation between IENFD and stimulated digit-5 skin wrinkling was significant ($p=0.012$; $r=0.3$) as was correlation between IENFD and sural nerve amplitude ($p=0.05$; $r=0.32$). All other correlations were not significant.**Conclusions:** Two small nerve fibre tests, SSW and IENFD show statistically significant correlation in patients with polyneuropathy from a variety of causes. Correlation of SSW with sural nerve amplitude is likely a result of the latter being a sensitive marker of sensory neuropathy which depends on the underlying etiology and frequently involves both small and large fibres.

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AUTONOMIC DYSFUNCTION IN ISAACS SYNDROME: A CASE WITH ASYMMETRICAL SYMPATHETIC STIMULATIONM. Yoshioka¹, H. Onodera¹, H. Saito², T. Takahashi¹, H. Konno¹, H. Tanaka¹, M. Endo³¹Department of Neurology, National Hospital Organization Nishitaga Hospital, ²Department of Neurology, Sendai-Higashi Neurosurgical Hospital, ³Department of Neurology, Tohoku Kouseinenkin Hospital, Sendai, Miyagi, Japan