

established based on one case. However, this case highlights the relevance of a thorough physical examination in all patients with epilepsy, including a skin examination, as well as a proper imaging protocol in some generalized epilepsy cases.

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P12-S Frontotemporal electrode set for ICU bedside cEEG monitoring for comatose patients after cardiac arrest—Huub Lievestro^{a,*}, Anne-Fleur van Rootselaar^b, Marjolein Admiraal^c, Michel van Putten^{d,e}, Janneke Horn^c (^aTechnical Medicine, University of Twente, Enschede, the Netherlands, ^bAmsterdam UMC, University of Amsterdam, Department of Neurology and Clinical Neurophysiology, Amsterdam Neuroscience, Amsterdam, the Netherlands, ^cAmsterdam UMC, University of Amsterdam, Department of Intensive Care, Amsterdam, the Netherlands, ^dDepartment of Clinical Neurophysiology and Neurology, Medisch Spectrum Twente, Enschede, the Netherlands, ^eDepartment of Clinical Neurophysiology, MIRA-Institute for Biomedical Technology and Technical Medicine, University of Twente, Enschede, The Netherlands)

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Background: Electroencephalogram (EEG) patterns within 24 h after cardiac arrest (CA) have shown to reliably predict neurological outcome. The recording set-up may be simplified by using a less extensive electrode set. We compared a 4-channel frontotemporal EEG headband (BrainStatus, Bittium, Oulu, Finland) to a 9-channel Ag-AgCl electrode set.

Material and methods: Between July 2018 and January 2019, EEGs were recorded in 22 consecutive adult patients admitted after CA with both electrode sets simultaneously. EEG patterns were assessed visually, corresponding to the guidelines of the American Clinical Neurophysiology Society (ACNS). Five minute epochs at 24 h after CA were scored by three independent EEG readers blinded to clinical data. Final classification was determined by majority vote. To evaluate classification agreement between the electrode sets, confusion matrices and Cohen's Kappa were used.

Results: At 24 h after CA, the background patterns of 21 patients were available. With the 9 electrode set, nine patients had a continuous pattern, two patients had a discontinuous pattern, two patients showed burst-suppression without identical burst, one patient showed burst-suppression with identical bursts, and four patients had a suppressed background pattern. The background pattern of three patients was obscured by artefacts. The agreement for background pattern scoring of the 4 electrode set compared to this 9 electrode set was fair ($\kappa = 0.32$).

Conclusions: Visual classification of EEG patterns in patients with postanoxic coma with a 9-channel Ag-AgCl electrode set cannot be replaced with a 4-channel frontotemporal EEG headband.

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P13-S Brainstem auditory and median somatosensory evoked potentials evaluation of clinical outcome in hemorrhagic stroke patients—Nikola Blazević^{*}, Magdalena Krbot Skorric, Zdravka Poljaković, Svjetlana Supe, Vesna Matijević, Domagoj Alvir, Antonela Bazina, Josip Ljevak, Katarina Starčević, Ivan Jovanović, Mario Habek, Tereza Gabelić (UHC Zagreb, Zagreb, Croatia)

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Introduction: Aim of this study was to assess evoked potentials in the prediction of clinical outcome in hemorrhagic stroke patients.

Methods: In 46 patients (23 men, mean age 65.17 ± 12.58) with hemorrhagic stroke (33 intracerebral and 13 subarachnoid hemorrhage) within the 48 h after admission to neurointensive care unit (NICU), brainstem auditory evoked potentials (BAEP) and median nerve somatosensory evoked potentials (mSSEP) were performed. Among clinical parameters, the Glasgow Coma Score (GCS) and the Full Outline of Unresponsiveness (FOUR) were assessed on the admission and discharge day, while Modified Rankin scale (mRS) was assessed on the discharge day.

Results: At the admission, there was statistically significant negative correlation between BAEP latencies and FOUR score and GCS. Regarding discharge data, there was significant negative correlation between discharge GCS and right wave V latency and significant positive correlation of mRS with latency of right wave V.

Among mSSEP results, significant negative correlation was found between right P14-N20 interlatency and admission date FOUR score and GCS. Also, significant positive correlation was found between both FOUR score and GCS on the admission date with mSSEP P15-N20 amplitudes.

Significant positive correlation was found between mSSEP P15-N20 amplitudes and discharge day GCS and FOUR scale values. mRS significantly positively correlated with N20 latencies, while significant negative correlation was found between mRS and mSSEP P15-N20 amplitudes.

Conclusion: BAEP and mSSEP correlate with different clinical outcomes at admission and discharge in patients with hemorrhagic stroke.

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P14-S Latency of Mismatch Negativity as a predictor of outcome in critically patients with subarachnoid haemorrhage—Iliaria Martinelli^{a,d,*}, Angela Marchi^a, Giulia Naim^c, Estelle Pruvost^{a,b}, Celine Ramdani^f, Tarek Sharshar^{c,e}, Martine Gavaret^{a,b,g} (^aCentre Hospitalier Sainte Anne, Paris, France, ^bParis-Descartes University, Paris, France, ^cDepartment of Neuro-Intensive Care Medicine, Sainte-Anne Hospital, Paris, France, ^dDepartment of Neurology, OCSAE Hospital, Azienda Ospedaliera Universitaria, Modena, Italy, ^eLaboratory of Experimental Neuropathology, Institut Pasteur, Paris, France, ^fInstitut de Recherche Biomédicale des Armées (IRBA), 91223 Brétigny sur Orge, France, ^gINSERM UMR894, Paris, France)

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Background: Multimodal neurophysiological markers support clinical assessments in individuals with disorders of consciousness (DoC). Few studies focused on subarachnoid haemorrhage (SAH) related coma. Furthermore, these patients often need sedation during the acute phase, making behavioral and neurophysiological monitoring challenging. We investigated which neurophysiological marker could better predict outcome in acute DoC related to SAH.

Methods: We studied 14 SAH patients admitted in the Sainte Anne hospital neurological ICU, between Oct 2017 and June 2018. All patients underwent within the first 72 h: clinical evaluation, EEG and multimodal evoked potentials (somatosensory potentials, brainstem auditory evoked potentials (BAEPs), late latency event-related potentials, N100 and mismatch negativity (MMN)). Quantitative EEG analysis using spectral and connectivity analysis was performed. According to the Glasgow Outcome scale (GOS), we defined two clinical outcome groups: favorable (F) and unfavorable (UF).