Multimodal Approach for Prognostication after Cardiac Arrest: post hoc analysis of a multicentric cohort

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INTRO

• International Guideline recommended pupillary light reflex (PLR) and/or cortical response (N20) to short-latency somatosensory evoked potentials (SSEPs) at 72 hours after return outcome in comatose patients after cardiac arrest to spontaneous circulation as the only strong predictors of unfavorable outcome.

METHODS

1. Post hoc analysis of an international multicenter (n=10; n=456 patients) prognostic study on automated pupillometry in comatose post-CA patients. We included 186 patients.
2. The primary endpoint was the accuracy of NPI in predicting 3-month unfavorable neurological outcome (UO).
3. Patients with findings on PLR, SSEPs, NPI and EEG, highest NSE were included.

CONCLUSIONS

• This study suggests the multimodal approach, including NPI, EEG, SSEPs and NSE, could identify a higher proportion of patients with UO but with higher FPR.