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Letter to the Editor

Prognostication in postanoxic coma: Not too early, not too late

To the Editor,

The new European guideline on prognostication of patients who remain comatose after cardiac arrest recommends a multimodal approach, starting 72 hours after return of spontaneous circulation (ROSC).[1] We completely agree that a combination of diagnostic tools should be used to obtain as much information as possible. Since prognostication is followed by decisions about continuation or withdrawal of life supporting care, accuracy is more important than speed. Nevertheless, we believe that the advice to wait until 72 hours after ROSC in all patients is difficult to justify.

In many hospitals, treatment includes target temperature management (TTM) at 36 °C for 24 hours.[2] Short acting sedative drugs are used for sedation, in line with the current recommendations.1 As no slow rewarming at the end of TTM at 36 °C is needed, sedative drugs can be stopped 24–26 hours after ICU admission. In patients that wake up shortly thereafter, no further prognostic tests are needed.

In patients who remain comatose due to hypoxic ischemic brain injury, early prognosis is important. Several results of reliable prognostic tests can be available quickly.[3] Absent pupillary light reflexes is an early sign of poor outcome, but only found in a minority of patients. Electroencephalography (EEG) measures derived from registration in the first 24 hours after cardiac arrest and somatosensory evoked potentials (SSEP) after weaning from sedative drugs are readily available in many hospitals.[4] Both methods provide reliable predictors of good or poor outcome, that have been validated repeatedly.[3,5–7] Together, these tests can reliably identify 50–60% of the patients with a good or poor outcome within 48 hours after ROSC. Additionally, the neuron specific enolase (NSE) value at 48 hours could be included, reducing uncertainly about outcome.[8]

We believe that in a substantial proportion of patients admitted after cardiac arrest, waiting until 72 hours after ROSC before prognostication is unethical. What is the additional value for the patient and family to extend uncertainty and futile intensive care unit (ICU) treatment?

Prognostication of neurological outcome of patients who remain comatose after cardiac arrest should be a careful and accurate process. Both poorly substantiated judgements and unnecessary delays should be avoided. Early prognostication, if possible, will add to respectful communication with family members and prevention of futile treatment in times that ICU beds are very scarce.

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