Care protocol for comatose patients may need revision

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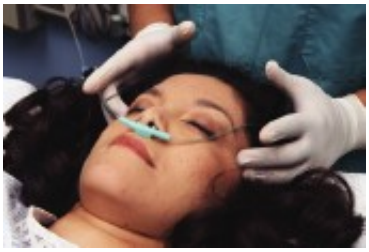

(HealthDay) -- Although neurological tests are highly reliable predictors of death in patients who remain in a coma following cardiopulmonary resuscitation (CPR), withdrawal-of-treatment decisions may need to be delayed for those who undergo mild hypothermia therapy, according to a Dutch study published in the February issue of the *Annals of Neurology*.

Aline Bouwes, M.D., of the Academic Medical Center in Amsterdam, and associates conducted a prospective study of 391 adult comatose patients given CPR prior to treatment with hypothermia (32 to 34 degrees Celsius) in the intensive care units of 10 Dutch medical centers, to determine the reliability of neurologic examination, neuron-specific enolase (NSE), and median nerve somatosensory-evoked potentials (SEPs) in predicting poor outcomes.

The researchers observed poor outcomes (death) in 208 patients (53

percent), with reliable predictors being absent papillary light responses (false-positive rate [FPR] 1) or absent corneal reflexes 72 hours after CPR (FPR 4), and absent SEPs during hypothermia (FPR 3) and after rewarming (FPR 0). Data showed that NSE levels and motor scores 72 hours after CPR (FPR 10) were not good predictors.

"In patients with persisting coma after CPR and therapeutic hypothermia, use of motor score or NSE, as recommended in current guidelines, could possibly lead to inappropriate withdrawal of treatment," the authors write. "Poor outcomes can reliably be predicted by testing brainstem reflexes 72 hours after CPR and performing SEPs."

One author disclosed financial ties to the Schering-Plough Research Institute.

More information: Abstract
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