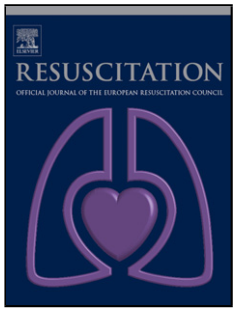

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EARLY LANCE-ADAMS SYNDROME AFTER CARDIAC ARREST: PREVALENCE, TIME TO RETURN TO AWARENESS , AND OUTCOME IN A LARGE COHORT

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Abstract

Introduction Early myoclonus after Cardiac Arrest (CA) is traditionally viewed as a poor prognostic sign (status myoclonus). However, some patients may present early Lance-Adams syndrome (LAS): under appropriate treatment, they can reach a satisfactory functional outcome. Our aim was to describe their profile, focusing on pharmacologic management in the ICU, time to return of awareness, and long-term prognosis.

Methods Adults with early LAS (defined as generalized myoclonus within 96 hours, with epileptiform EEG within 48 hours after CA) were retrospectively identified in our CA registry between 2006 and 2016. Functional outcome was assessed through Cerebral Performance Categories (CPC) at three months, CPC 1-2 defined good outcome.

Results: Among 458 consecutive patients, 7 (1.5%) developed early LAS (4 women, median age 59 years). Within 72 hours after CA, in normothemia and off sedation, all showed preserved brainstem reflexes and localized pain. All patients were initially treated with valproate, levetiracetam and clonazepam; additional agents, including propofol and midazolam, were prescribed in the majority. First signs of awareness occurred after 3-23 days (median 11.8); 3/7 reached a good outcome at three months.

Conclusion: Early after CA, myoclonus together with a reactive, epileptiform EEG, preserved evoked potentials and brainstem reflexes suggests LAS. This condition was managed with a combination of highly dosed, large spectrum antiepileptic agents including propofol and midazolam. Even if awakening was at times delayed, good outcome occurred in a substantial proportion of patients.