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MEMBERS OF THE NEUROVASCULAR TEAM OF THE HAGA TEACHING HOSPITALS

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eComment. Postoperative delirium in cardiac surgery

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Palmbergen et al. [1] are to be commended for evaluating a novel strategy called the Haga Brain Care Strategy, to reduce the incidence of postoperative delirium in patient undergoing cardiac surgery. The implementation of the Haga Brain Care Strategy yielded a significant reducing in the incidence of postoperative delirium (from 13.3% to 7.3%). This simple strategy consisted of the conventional screening protocol for delirium with the addition of preoperative transcranial Doppler examinations, perioperative cerebral oximetry, modified Rankin score and delirium risk score.

Delirium, or acute confusion, is a transient neurologic complication characterized by disturbances in consciousness, perception and cognition [2]. Delirium is a common and increasingly prevalent mental syndrome after cardiac surgery, and may be associated with increased morbidity and mortality. Delirium after cardiac surgery is also associated with many negative early consequences such as prolonged hospital and intensive care stay, increased rate of infection, higher prevalence of sternum instability, more readmission, more nursing home placement and poorer functional outcomes [3]. Since the syndrome is, by definition, a temporary one, there is a trend to view this mental syndrome as self-limited, and therefore without long-term sequelae. However, recently published investigations [4-5] showed that delirium is not only problematic in the immediate perioperative period, but it is also associated with poorer 1- and 5-year outcomes in patients undergoing cardiac surgery. A study by Martin et al. [4] assessing the 5-year outcomes in 496 delirious patients after cardiac surgery established that patient with delirium appear to have an increased long- term risk of mortality (hazard ratio, 1.52; 95% CI, 1.29-1.78) and hospitalization for stroke (hazard ratio, 1.54; 95% CI, 1.10-2.17). A prospective study by Saczynski et al. [5] enrolling 225 patients undergoing cardiac surgery from three centres and following them for 12 months after surgery showed that patient with postoperative delirium had a significant decline in cognitive ability up to one year after surgery with a long- lasting period of significant impairment.

Therefore, prevention of delirium must be enhanced to reduced early- and long-term morbidity. Early recognition of delirium symptoms enables the underlying cause to be diagnosed and treated, and can prevent negative outcomes. This important investigation with convincing data demonstrates that postoperative delirium can be preventable. We completely concur with the authors that proactive interventions are warranted to prevent this temporary mental dysfunction with long-lasting sequelae.

Conflict of interest: none declared

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