Whether awake coronary artery bypass grafting is contrary to fast-track surgery?

Yong X. Lianga,b,*, Yan B. Zhoua, Yi Shen and Miao N. Gub

a Department of Anesthesiology, The Affiliated Hospital of Qingdao University Medical College, Qingdao, China
b Nan Fang Hospital, The South Medical University, Guangzhou, China

* Corresponding author. Tel: +86-1380-8964009; fax: +86-0532-89087189; e-mail: liangzi66@hotmail.com (Y.X. Liang).

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We read with interest the recent paper of Go Watanabe et al [1], regarding awake off-pump coronary artery bypass grafting (OPCAB) under thoracic epidural anaesthesia (TEA). They compared 72 patients who underwent awake OPCAB under only TEA with 67 patients who underwent OPCAB under general anaesthesia (GA) and found that the time to drink water, the time to walk, and hospital stay were significantly shorter in awake OPCAB group. However, whether awake OPCAB is contrary to the concept of fast recovery surgery (FTS)?

FTS using multimodal perioperative rehabilitation programs was introduced in the early 1990s, including preoperative optimization and information, ‘stress reduced’ surgery, efficient postoperative pain treatment, adjustment of perioperative care principles to existing evidence, and nursing care focusing on early mobilization and oral nutrition to enhance recovery, decrease morbidity and hospital stay [2]. The ultimate goal of FTS is to provide the ‘stress, pain and risk-free’ operation, its centre is to minimize stress. The reduction of stress during an elective surgical procedure, as characterized by attenuation of the neurohormonal response to the operation, not only provides a rational basis for increased recovery but also diminishes the risk of organ dysfunctions and complications [3].

During awake OPCAB, the tension and anxiety which will increase the patients’ stress and reduce the patients’ comfort and satisfaction are inevitable because the patients remain conscious. It is contrary to the concept of fast recovery surgery. We think the main benefit of awake OPCAB is achieved by the TEA, but not keeping conscious during operation. TEA recently gained popularity because of its potential beneficial effects on the perioperative stress response, analgesia and postoperative pulmonary function. Studies had shown that intraoperative use of TEA combined with GA will allow decreased use of opioids and permit earlier extubation [4], will alleviate perioperative stress and enable effective postoperative epidural analgesia which have favourable effects on pulmonary function parameters [5], and will have beneficial effects in cardiac risk patients [6]. In addition, there is a lack of evidence-based data that patients who have a risk of cerebral ischaemia or chronic pulmonary diseases are benefit from awake OPCAB.

Whether it is the optimal method to use propofol or dexmedetomidine keeping patients sedation during OPCAB under TEA?

REFERENCES