

A closer look at fast-tracking research in pediatric cardiac surgery

Pediyatrik kalp cerrahisinde hızlandırılmış araştırmaya yakın bir bakış

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Dear Editor,

The recent original article by Özalp et al.^[1] is indeed an important addition to the literature on fast-tracking in pediatric cardiac surgery. The authors showed that neonatal age, low weight, Risk Adjustment for Congenital Heart Surgery (RACHS-1) score >4, The Society of Thoracic Surgeons-European Association for Cardio-Thoracic Surgery (STAT) category >3, cardiopulmonary bypass time >100/min, vasoactive inotrope score (VIS) >8, and acute kidney injury >2 as independent risk-factors for delayed extubation, in a retrospective analysis of 528 pediatric surgery patients. However, there are interesting nuances in the index study which are worth discussing. Notably, the authors included the peak VIS values for the corresponding analysis, despite a dynamic nature of post-cardiotomy hemodynamic support. Crow et al.^[2] described an augmented predictive ability of VISindex as opposed to VISmax while studying prolonged mechanical ventilation after infant cardiac surgeries (area under the curve [AUC]: 95% confidence interval [CI]: 0.85; 0.79-0.90 vs. 0.80; 0.75-0.86). They employed the VISmax over the consecutive postoperative 24 h to estimate the VISindex (VISmax_{0-24 h} + VISmax_{24-48 h} + 2×VISmax_{48-72 h}).^[2] Moreover, Özalp et al.^[1] did not consider prevailing respiratory infections in their cohort. In an experience

with a total of 2,060 pediatric cardiac surgery patients, Wu et al.^[3] emphasized the importance of preoperative pneumonia in the multivariate regression models for immediate and early postoperative extubation (odds ratio [OR]: 95% CI; p=0.60; 0.44-0.80; 0.001 vs. 0.69; 0.49-0.97; 0.033). Given the former group additionally highlights the role of ultrafiltration in influencing post-cardiac surgery extubation, one can simultaneously not undermine the relevance of knowing about the ultrafiltration (or the modified ultrafiltration) practices employed in the present study setting.^[3,4]

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