Target Temperature Management for Postcardiac Arrest Patients

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Dear Editor:

WE READ WITH INTEREST the Letter to the Editor (Perchiazzi *et al.*, 2014) highlighting limitations in the Nielsen study (Nielsen *et al.*, 2013). Here we identify additional major biases that could affect practitioners' interpretations and decisions. Temperature profiles during the intervention showed large deviations in body temperature: from below 31°C to over 34°C in the 33°C group, and from 34°C to 37°C in the 36°C group. Imprecise temperature control can cause serious bias in the differentiation of outcomes between groups. Also, the authors state that neurological evaluation was performed 72 hours after intervention to recommend subsequent therapy. However, for patients cooled to 33°C, this timing is too early to decide on the withdrawal of therapy, as such patients have significantly delayed drug clearance (Fukuoka *et al.*, 2004). This might explain the study's relatively low rate of favorable neurological outcome. The authors report that the rate of cerebral performance category 1 and 2 in the 33°C group was 47%, which is lower than previously reported rates (Sunde *et al.*, 2007; Yokoyama *et al.*, 2011). This again may be because of the very early withdrawal of therapy.

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