

Deep Hypothermic Circulatory Arrest in Aortic Dissection Surgery



To the Editor,

We congratulate Talwar and colleagues for their successful series [1]. In the study, they performed antegrade cerebral perfusion (ACP) by axillary cannulation and used deep hypothermic circulatory arrest (DHCA) in all patients. It seems that selective ACP (SACP) was used only in a limited number of patients who had undergone arcus aorta intervention. We are interested to learn why the authors preferred DHCA. If the aim is cerebral protection, this was already partially achieved by ACP by axillary cannulation. If they thought that this was not enough, why was SACP not preferred in all patients? If SACP was performed, DHCA would not have to be performed at such low temperatures and this could be done with moderate hypothermic circulatory arrest. Many publications have noted that DHCA, which is a very common procedure, should be used with caution because of the physiopathologic events that occur during the procedure, especially if performed at very low temperatures and for long duration [2–4].

The other issue we want to mention is whether or not the cannulation method in aortic dissection surgery has an effect on the surgical outcomes. We believe that the preferred method of cannulation will not change postoperative mortality rates or rates of neurological complications as long as ACP is used for cerebral protection. Several studies have shown that the basic parameters affecting mortality rates and neurological complication rates in ATAAD operations are preoperative conditions such as the presence of preoperative malperfusion findings [5–7]. We believe that sharing the authors' ideas about this subject will add value to their study.

Orhan Gokalp, MD *

Izmir Katip Celebi University, Faculty of Medicine, Department of Cardiovascular Surgery, Izmir, Turkey

Hasan İner, MD

Adiyaman University Education and Research Hospital, Department of Cardiovascular Surgery, Adiyaman, Turkey

Nihan Yesilkaya Karakas, MD

Tunceli State Hospital, Department of Cardiovascular Surgery, Tunceli, Turkey

Sahin Iscan, MD

Izmir Ataturk Education and Research Hospital, Department of Cardiovascular Surgery, Izmir, Turkey

Gamze Gokalp, MD

Izmir Tepecik Education and Research Hospital, Department of Paediatrics Emergency, Izmir, Turkey

Yuksel Besir, MD

Levent Yilik, MD

Izmir Katip Celebi University, Faculty of Medicine, Department of Cardiovascular Surgery, Izmir, Turkey

*Corresponding author.

Email: gokalporhan@yahoo.com (O. Gokalp).

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