

Identification of mitochondrial antigens recognized by antibodies in sera of patients with idiopathic dilated cardiomyopathy by two-dimensional gel electrophoresis and protein sequencing. *Am J Cardiol* 1997;80:1040–5.

10. Nopp A, Johansson SG, Lundberg M, Oman H. Simultaneous exposure of several allergens has an additive effect on multi-

sensitized basophils. *Allergy* 2006;61:1366–8.

11. Kounis NG, Mazarakis A, Almpanis G, Gkouias K, Kounis GN, Tsigkas G. The more allergens an atopic patient is exposed to, the easier and quicker anaphylactic shock and Kounis syndrome appear: Clinical and therapeutic paradoxes. *J Nat Sci Biol Med* 2014;5:240–4.

Predictors of neurologically favorable survival among patients with out-of-hospital cardiac arrest: A tertiary referral hospital experience

To the Editor,

We read the article entitled “Predictors of neurologically favorable survival among patients with out-of-hospital cardiac arrest: A tertiary referral hospital experience” by Kevser Gulcihan Balci et al.^[1] with great interest. We want to thank the authors for this valuable contribution to the literature.

Both in-hospital and out-of-hospital cardiac arrest are very challenging entities, though the prognosis is worse for the latter. Cardiac arrest, independent of etiology, can cause very severe disabilities, including neurological complications. Early efforts with medical and mechanical cardiopulmonary resuscitation (CPR) and effective airway management (EAM) are necessary. In case of inadequate circulation and oxygenation of vital organs, death or serious disabilities caused by ischemic encephalopathy are inevitable. Neurological complications, in particular, lead to increased expenses, both for the patient’s family and for the country, by increasing hospitalization duration and necessity for physical treatment. So we wonder about some issues in this trial. The first point is about EAM. Even though CPR guidelines have proposed chest compressions rather than breathing in order to minimize the time to initiation of blood circulation,^[2] oxygenation, which is best provided with EAM like endotracheal intubation, is very important for both cardiac and neurological well-being. There are some trials with contradictory survival results regarding out-of-hospital airway management.^[3,4] In our country, unfortunately, many patients are transported to hospital without being intubated or with esophageal intubation, especially if the response crew is untrained. We wonder if there is any difference between successful return of spontaneous circulation and failure with respect to intubation timing. The second point, which is directly related to the result of this trial, is neurologi-

cal disability. It is very difficult for cardiologists to analyze and record the neurological status of patients in a retrospective trial. Interpretation of Cerebral Performance Category scale by a cardiologist may not be enough for classification, so we wonder if a neurologist evaluated all of the patients in this study. It would be a better and more objective way to obtain more valuable results. Aside from these points, this trial is enlightening work about cardiac arrest and neurological consequences.

Fatih Kahraman¹, M.D., Serdar Güler², M.D.,
Tülay Oskay³, M.D.

¹Department of Cardiology, Düzce Atatürk State Hospital, Düzce, Turkey

²Department of Cardiology, Midyat State Hospital, Mardin, Turkey

³Department of Cardiology, Merzifon Karamustafa Paşa, Amasya, Turkey

e-mail: drfkahraman@hotmail.com

doi: 10.5543/tkda.2017.75088

Conflict-of-interest issues regarding the authorship or article: None declared

References

- Balci KG, Balci MM, Şen F, Akboğa MK, Kalender E, Yılmaz S, et al. Predictors of neurologically favorable survival among patients with out-of-hospital cardiac arrest: A tertiary referral hospital experience. *Turk Kardiyol Dern Ars* 2017;45:254–60.
- Kleinman ME, Brennan EE, Goldberger ZD, Swor RA, Terry M, Bobrow BJ, et al. Part 5: Adult Basic Life Support and Cardiopulmonary Resuscitation Quality: 2015 American Heart Association Guidelines Update for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. *Circulation* 2015;132:S414–35. [[CrossRef](#)]
- Kang K, Kim T, Ro YS, Kim YJ, Song KJ, Shin SD. Prehospital endotracheal intubation and survival after out-of-hospital cardiac arrest: results from the Korean nationwide registry. *Am J Emerg Med* 2016;34:128–32. [[CrossRef](#)]
- Jeong S, Ahn KO, Shin SD. The role of prehospital advanced airway management on outcomes for out-of-hospital cardiac arrest patients: a meta-analysis. *Am J Emerg Med* 2016;34:2101–6. [[CrossRef](#)]