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## Letter to the Editor

# Reply to: Suggestions to improve the traumatic cardiac arrest guidelines based on practical prehospital experience



Dear colleagues,

Thank you for your valuable comments on the section traumatic cardiac arrest (TCA) in our European Resuscitation Council (ERC) 2021 guideline chapter “Cardiac arrest in special circumstances”.<sup>1</sup>

In the TCA algorithm (figure 2) we list the relevant reversible causes of TCA. They are enumerated in the same order as in the overall chapter (special causes: hypoxia, hypovolaemia, hypo/hyperkalaemia and other electrolyte disorders, hypothermia, thrombosis, cardiac tamponade, tension pneumothorax, toxic agents), not meaning any kind of ranking. The management of the vital functions should occur in parallel according to their individual priority - the ones that are most relevant for the individual patient’s survival need to be addressed first.

Securing an airway does not necessarily mean tracheal intubation and we agree with your view that simple measures should be applied first. We recommend the use of an oropharyngeal airway and a supraglottic airway, in combination with high-flow oxygen, to clear an obstructed airway initially and to maintain oxygenation.

In cardiac tamponade we recommend “immediate resuscitative thoracotomy (RT) via a clamshell or left anterolateral incision, to restore circulation.” This intervention needs a number of prerequisites as summarised in the “four E rule” – expertise, equipment, environment and strict time management. As there has been no significant new evidence since the 2015 ERC guidelines, ultrasound guided pericardiocentesis is only recommended if thoracotomy is not possible.<sup>2</sup>

## Conflict of interest

KT reports Federal research funding for drone AED research.

## REFERENCES

1. Lott Carsten, Truhlar Anatolij, Alfonzo Annette, et al. European Resuscitation Council Guidelines 2021: Cardiac arrest in special circumstances. *Resuscitation* 2021;161:152–219, doi:<http://dx.doi.org/10.1016/j.resuscitation.2021.02.011>.
2. Truhlar Anatolij, Deakin Charles, Soar Jas, et al. European Resuscitation Council Guidelines for Resuscitation 2015: Section 4. Cardiac arrest in special circumstances. *Resuscitation* 2015;95:148–201.

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