Even though intraoperative cardiac arrest (IOCA) is considered very rare during both general and regional anaesthesia, it is also a potentially catastrophic event for both the patient and the anaesthesiologist. An IOCA is distinct from other settings since it occurs in the operating room (OR) and is frequently predicted by patient monitoring or anticipated by the anaesthesia care provider. Moreover, underlying causes are not solely attributed to individual patient factors, but also due to other perioperative effects (e.g. surgery, bleeding, hypoxia, or anaesthetic agent).

The incidence of IOCA varies widely among recently published studies. An overall incidence for IOCA of 4.3 to 34.6 per 10,000 procedures is reported. However, more specifically, the incidence of anaesthesia-related cardiac arrests in non-cardiac surgery patients is approximately 90% lower and ranges from 0.2 to 1.1 per 10,000 in adults and from 1.4 to 4.6 per 10,000 in children. One major limitation of recent research is that most published studies are from single centres and contain small patient samples, which significantly limits their internal and external validity, and thus conclusions.

Besides such data on the incidence of IOCA, underlying factors, demographic data, treatment protocols, and outcomes are not well known and thus far not standardized. The aim of this guideline is to present practical recommendations how to prevent and treat an IOCA on an evidence-based level.

Composition

Chairperson

Prof. Dr. Jochen Hinkelbein, DESA, EDIC, FAsMA

Members

Janusz Andres

Bernd Böttiger
Luca Brazzi

Edoardo De Robertis

Sharon Einav M.D

Carl Gwinnutt

Paweł Krawczyk

Bahar Kuvaki

Matthew D McEvoy

Pieter Mertens

Vivek K. Moitra

Jose Navarro

Jerry Nolan

Mark Nunnall

Michael O'Connor

Marcus Rall
<table>
<thead>
<tr>
<th>Kurt Ruetzler</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lorenz Theiler</td>
</tr>
<tr>
<td>Karl-Christian Thies</td>
</tr>
<tr>
<td>Jonathan Tilsed</td>
</tr>
<tr>
<td>Eric Voiglio</td>
</tr>
<tr>
<td>Mauro Zago</td>
</tr>
</tbody>
</table>

If you have any question, please do not hesitate to contact us: research@esahq.org