Anaesthesist 2001:50(5):342-57. Abstract in English; article in German.

The New International Guidelines for Cardiopulmonary Resuscitation: An Analysis and Comments on the Most Important Changes

Wenzel V, Voelckel WG, Krismer AC, Mayr VD, Strohmenger HU, Baubin MA, Wagner-Berger H, Stallinger A, Lindner KH; American Heart Association; European Resuscitation Council.

In August 2000, the American Heart Association and the European Resuscitation Council published the conclusions of the International Guidelines 2000 Conference on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care which contains both the new recommendations and an in-depth review. The discussions and drafting began at a conference in March 1999, followed by a second conference in September 1999, both attended by approx. 250 participants and another conference in February 2000 which was attended by approx. 500 participants. Review of the current state of science, discussion and final consensus continued subsequently via email, conference calls, fax, and personal conversation. During the entire process, scientists and resuscitation councils from all over the world participated, with participants from the United States comprising approx. 60%, and scientists from outside of the United States comprising approx. 40%. In order to ensure that the CPR recommendations are not dominated by any given nation or resuscitation council, most topics were reviewed and interpreted by two scientists from the United States and two scientists from outside of the United States. Accordingly, changes in these new CPR recommendations are the result of an evidence-based review by worldwide experts. The most important changes in the recommendations according to the authors are discontinuation of the pulse-check for lay people, 500 ml instead of 800-1200 ml tidal volume during bag-valve-mask ventilation (FiO2 > 0.4) of a patient with an unprotected airway, verifying correct endotracheal intubation with capnography and an esophageal detector, employing mechanical devices such as interposed abdominal compression CPR, vest CPR, active-compression-decompression CPR, and the inspiratory threshold valve (ITV) CPR as alternatives or adjuncts to standard manual chest compressions, defibrillation with < 200 Joule biphasic instead of with 200-360 Joule monophasic impulses, vasopressin (40 units) and epinephrine (1 mg) as comparable drugs to treat patients with ventricular fibrillation, amiodarone (300 mg) for shock-refractory ventricular fibrillation and intravenous lysis for patients who have suffered a stroke.