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ADVISORY STATEMENT

COMPRESSION ONLY CPR

The Australian Resuscitation Council (ARC) guidelines for CPR currently recommend:

- 2 ventilations followed by 30 chest compressions when performing CPR. Chest compressions should be delivered at a rate of 100 per minute ensuring adequate depth of compression and minimal interruption to compressions.
- Where a rescuer is either untrained or unwilling to perform CPR they should deliver continuous uninterrupted chest compressions only at a rate of 100 per minute.
- Untrained rescuers who seek basic life support instructions from Emergency Medical Services by telephone are advised to deliver continuous uninterrupted chest compressions only at a rate of 100 per minute.
- Any attempt at resuscitation is better than no attempt.

These recommendations were developed from an extensive international review of the resuscitation science undertaken under the auspices of the International Liaison Committee of Resuscitation (ILCOR) and published in November 2005.¹ Since then, a number of studies have been published which suggest that providing ventilations during CPR has no added benefit in terms of survival than providing chest compressions alone. These studies have received considerable coverage in the media with calls to change the guidelines to recommend compression only CPR.²⁻⁴

In March 2008 the American Heart Association issued a statement recommending that bystanders, trained or untrained in CPR, should at a minimum provide compression-only CPR. If the rescuer is trained and confident in performing CPR, then they should provide conventional CPR at a compression-ventilation ratio of 30:2. This statement also recognised the previously well documented reluctance of bystanders to perform any CPR and the poor survival following out-of-hospital cardiac arrest.⁵

The ARC has extensively reviewed the recently published evidence and does not consider it to be of sufficient magnitude to warrant a change in the current guidelines. In making this decision the ARC considered the following issues:

- The recently published studies are observational. Such studies are widely accepted as being insufficient to determine if any CPR method is equivalent or superior to others.

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- The reported survival rate in these studies were no better that what is being achieved with conventional CPR with the base survival rate being lower.
- The data reported in these studies were collected before 2003. This is prior to the 2005 guideline changes recommending a compression / ventilation ratio of 30:2 and reducing interruptions to compressions.
- There have been no studies which compare the current CPR recommendations (ie 30:2) with compression-only CPR.
- Ventilation remains important in a significant proportion of cardiac arrests. These include cardiac arrests in children, those due to drowning or airway obstruction, in-hospital cardiac arrests and resuscitation attempts beyond the first 3 to 4 minutes. Compression-only CPR is insufficient in these circumstances.

Accordingly the ARC recommends no change to the current CPR guidelines. The ARC and other national resuscitation authorities will continue to evaluate new scientific data as it becomes available and issue guidelines supported by such evidence. The recommendations outlined in this advisory statement are consistent with those of the European Resuscitation Council.

In summary, the ARC recommends:

- A compression-ventilation ratio of 30:2 should be given when providing CPR.
- Compression-only CPR should be administered only if the rescuer is unable or unwilling to provide conventional CPR
- Any attempt at resuscitation is better than no attempt.



Chairman

2nd April 2008

References

1. International Liaison Committee on Resuscitation. Consensus on Science and Treatment Recommendations. Resuscitation 2005;67:181-314.
2. Iwami T, Kawamura T, Hiraide A, et al. Effectiveness of bystander initiated cardiac only resuscitation for patients with out of hospital cardiac arrest. Circulation 2007;116:2900-7.
3. Nagao KK, Cardiopulmonary resuscitation by bystanders with chest compression only (SOS-KANTO): An observational study. Lancet 2007;369:920-6.
4. Bohm K, Rosenqvist M, Herlitz J, Hollenburg J, Svensson I. Survival is similar after standard treatment and chest compressions only in out of hospital bystander cardiopulmonary resuscitation. Circulation 2007;116:2908-12.
5. <http://circ.ahajournals.org/cgi/reprint/circulationaha.107.189380>