

Post-cardiac arrest care key to survival

October 23 2008

The urgent need for treatment doesn't end when a person regains a pulse after suffering sudden cardiac arrest — healthcare providers need to move quickly into post-cardiac arrest care to keep a person alive and ensure the best outcome.

That's the conclusion of the American Heart Association science advisory published today in *Circulation: Journal of the American Heart Association*.

Brain injury, heart dysfunction, systemic inflammation and the underlying disease that caused the cardiac arrest all contribute to the high death rate of patients who initially have their pulse re-started. Collectively, these symptoms are known as post-cardiac arrest syndrome.

The largest modern report of cardiac arrest resuscitation was published by the National Registry of CPR in 2006. Among the 19,819 adults and 524 children whose hearts were re-started, in-hospital mortality rates were 67 percent and 55 percent, respectively.

The new statement says there is growing evidence that post-cardiac arrest care can lower the death rate and improve functional outcome for these patients.

"Although we have become better at restarting the heart, we are only beginning to learn and implement the best ways to keep patients alive and minimize brain damage after their heart is re-started," said Robert W. Neumar, M.D., Ph.D., head of the statement writing committee and

associate professor of emergency medicine and associate director of the Center for Resuscitation Science at the University of Pennsylvania in Philadelphia.

Research shows that many aspects of post cardiac arrest syndrome can be treated. The advisory discussed treatments for various types of patients such as:

Unconscious adult patients resuscitated after out-of-hospital cardiac arrest were recommended to receive mild therapeutic hypothermia, which is cooling to 32°C to 34°C (89.6°F to 93.2°F) for at least 12 to 24 hours. Therapeutic hypothermia can improve survival and decrease the risk of brain damage.

- Patients resuscitated from a cardiac arrest caused by a heart attack (as seen on an electrocardiogram, or ECG) should have immediate coronary angiography (an X-ray examination of the heart arteries) to check for artery blockages. Standard guidelines for heart attack treatment should be followed, which may include an artery-opening procedure (angioplasty) or administering a clot-busting drug to re-establish blood flow to the heart.

The advisory also discussed treatment for high blood sugar, seizures and infection, all of which are common concerns after cardiac arrest resuscitation. Also, inserting an implantable cardioverter defibrillator (ICD) is indicated for many patients with good neurological function.

Source: American Heart Association

Citation: Post-cardiac arrest care key to survival (2008, October 23) retrieved 6 May 2024 from <https://medicalxpress.com/news/2008-10-post-cardiac-key-survival.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.