World Academy of Science, Engineering and Technology
International Journal of Health and Medical Engineering
Vol:9, No:02, 2015

The Use of Emergency Coronary Angiography in Patients Following Out-Of-Hospital Cardiac Arrest and Subsequent Cardio-Pulmonary Resuscitation

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Abstract : Objectives: 1) To identify if emergency coronary angiography improves outcomes in studies examining OHCA from assumed cardiac aetiology? 2) If so, is it indicated in all patients resuscitated following OHCA, and if not, who is it indicated for? 3) How effective are investigations for screening for the appropriate patients? Background: Out-of-hospital cardiac arrest is one of the leading mechanisms of death, and the most common causative pathology is coronary artery disease. In-hospital treatment following resuscitation greatly affects outcomes, yet there is debate over the most effective protocol. Methods: A literature search was conducted over multiple databases to identify all relevant articles published from 2005. An inclusion criterion was applied to all publications retrieved, which were then sorted by type. Results: A total of 3 existing reviews and 29 clinical studies were analysed in this review. There were conflicting conclusions, however increased use of angiography has shown to improve outcomes in the majority of studies, which cover a variety of settings and cohorts. Recommendations: Currently, emergency coronary angiography appears to improve outcomes in all/most cases of OHCA of assumed cardiac aetiology, regardless of ECG findings. Until a better tool for screening is available to reduce unnecessary procedures, the benefits appear to outweigh the costs/risks.

Keywords : out of hospital cardiac arrest, coronary angiography, resuscitation, emergency medicine
Conference Title : ICEM 2015 : International Conference on Emergency Medicine
Conference Location : London, United Kingdom
Conference Dates : February 16-17, 2015