(CO) PREHOSPITAL THERAPEUTIC HYPOTHERMIA IN RECOVERED CARDIAC ARREST VICTIMS

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Introduction

Therapeutic Hypothermia consists in the induced body cooling in order to maintain a core temperature of 33°C, with the purpose of reversing and/or preventing the mechanisms responsible for the neurological reperfusion injury after spontaneous circulation recovery. There is some evidence that therapeutic hypothermia improves survival and neurologic outcome after cardiac arrest occurred in the prehospital, but their use is not yet agreed in victims with spontaneous circulation recovery.

Objective

This study aims to determine the effectiveness of prehospital therapeutic hypothermia in survival and neurological outcomes improvement of victims who suffered a cardiac arrest outside the hospital.

Methods

It was made a systematic review of the studies assessing the effectiveness of using therapeutic hypothermia on cardiac arrest patients in a prehospital context. Five RCT's involving 759 participants were selected: 378 of the group of prehospital hypothermia and 378 of the control group.

Results

Results showed no significant differences in survival and neurological outcome in medical release when therapeutic hypothermia in the prehospital is used, comparing to normothermia or hospital therapeutic hypothermia.

Conclusions

Therapeutic hypothermia in the prehospital has no influence on survival and favorable neurological outcomes at discharge, but has the benefit with clinical relevance in the temperature values at the time of hospital admission, so it infers the need for more studies to assess the effectiveness of this therapeutic measure.

Keywords

Cardiac arrest; Prehospital; Therapeutic hypothermia.