

PREHOSPITAL THERAPEUTIC HYPOTHERMIA: INFLUENCE IN GOOD NEUROLOGICAL OUTCOME AT HOSPITAL DISCHARGE

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Introduction: Therapeutic hypothermia improves neurological outcomes after Out-of-Hospital Cardiac Arrest (OHCA). Its use has been recommended in the victims with Return of Spontaneous Circulation (ROSC). **Objectives:** The aim of this study was to know the effect of Prehospital Therapeutic Hypothermia (PHTH) on the neurological outcomes in victims with OHCA. **Methods:** We conducted a Systematic Review of Literature (SRL) on studies that evaluated the effect of HTPH in victims with OHCA and also performed a research (in PUBMED, EBSCO and Google Scholar) in studies published between January 2007 and 31 May 2013. The studies found were then assessed taking into account the previously established inclusion criteria. The quality of the studies included was assessed by two reviewers using the critical evaluation scale of a study describing a prospective, randomized, controlled clinical trial (RCT) by Carneiro (2008). The meta-analysis was performed using the Mantel-Haenszel method, using the effect of random models. **Results:** Five RCT's that respect the inclusion criteria were used, involving 759 participants from which 378 were selected from the prehospital hypothermia group and 381 from the control group. The studies show that there are not significant differences observed with respect to the neurological outcomes favorable at discharge (RR = 0.98; 95% CI = 0.79 to 1.20; p = 0.83). **Conclusions:** Despite SRL show that PHTH has no influence on the neurological outcome at hospital discharge, the scientific evidence points to an improvement in neurologic outcomes when kept at normothermia, so suggests a prompt reference to health units where can be made a control of temperature in the victims with ROSC in prehospital. **Keywords:** Therapeutic hypothermia, Cardiac arrest, Prehospital.