Obstacles and Facilities of Mild Therapeutic Hypothermia Induction Following Successful Cardiopulmonary Resuscitation; a Feasibility Study

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Abstract

Introduction: Based on the protocol of American Heart Association (AHA), target temperature of 32°C to 36°C for at least 24 hours should be provided, continuously, for all cases of spontaneous return of blood flow following successful cardiopulmonary resuscitation (CPR) in adult patients with evident altered level of consciousness. Therefore, the present study was done to evaluate the obstacles and assess the possibility of performing this protocol for patients in emergency department. Methods: This study was a qualitative research that consisted of 2 phases. In the first phase, by meeting the specialists involved with these patients, a standard questionnaire was filled regarding the obstacles to performing this protocol from their viewpoint. In the second phase, hypothermia protocol was done on a sample of eligible patients in emergency department. The aim of this phase was to find the problems of doing this protocol in real practice. The findings were reported using descriptive statistics. Results: A total of 100 questionnaires were filled. Lack of experience or needing more information with 58%, limited facilities and equipment with 46% and lack of a national protocol with 24%, respectively, were the most important obstacles from the specialists' point of view. In addition, losing golden time (57.14%), the in charge attend not giving permission (28.57%), and the relatives not giving consent (14.28%) were among the most important obstacles in the executive phase. Conclusion: Based on the findings of the present study, it seems that training the physicians involved with these patients regarding induction of hypothermia with the primary equipment present in emergency departments, writing inter-department protocols and preparing national protocols in this regard can help in spreading this treatment method.

Keywords: Heart arrest; cardiopulmonary resuscitation; hypothermia, induced; hypoxia, brain