

Service Priorities and Programmes

Electronic Presentations

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Implement evidence-based findings to save 2 vital organs – Therapeutic hypothermia

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Introduction

Therapeutic hypothermia is known to improve survival and decrease mortality after two randomized controlled trials published in 2003. Implementation of an effective and rapid therapeutic hypothermia is the key to optimize neurological outcome. Evidence based project (EBP) had been done in 2013 to review various cooling methods for therapeutic hypothermia on patient after cardiac arrest. Result showed that the most effective way is the combined use of different cooling methods. To put findings into practice and ensure compliance, a structured protocol/flow chart are revised and developed; not only to save life, but also to save organs. It is an essential treatment that can be used to reduce mortality and improved neurological outcomes. This inexpensive way can make a big difference on patient's quality (conscious level) and quantity (mortality) of life.

Objectives

The aims of this project are: - To develop a protocol/flow chart to facilitate staff's compliance to EBP result. - To evaluate the effectiveness of the newly developed therapeutic hypothermia protocol/flow chart.

Methodology

Protocol/flow chart had been revised after the EBP project result was obtained in 2013. Staff education and briefing on the EBP findings and newly developed therapeutic hypothermia protocol/flow chart were done in April, 2015. The protocol/flow chart were put into practice since May, 2015. Data was collected from May to November, 2015 and reviewed for the effectiveness.

<u>Result</u>

9 post cardiac arrested patients were admitted to ICU from May to November, 2015. Therapeutic hypothermia treatment was provided according to newly developed therapeutic hypothermia protocol. Six patients (67%) achieved target temperature within 4 hours. The average time to achieved targeted temperature was 4.8 hours. Seven patients' life (78%) were saved. Among these seven patients, all of them had improved neurological outcome. This protocol improved the average time to achieve targeted temperature and survival rate.