

GETTING WARMER

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INTRODUCTION

Accidental hypothermia is a common presentation to the Emergency Department (ED). Active external re-warming often involves the use of a disposable forced air warming blanket such as the Bair Hugger. Shortcomings of these devices include the tendency for the blanket to migrate to the foot of the bed and from there, the floor.

OBJECTIVE

To evaluate an alternative external re-warming system not previously used in the treatment of hypothermia or in the ED setting. The Inditherm system (used for hypothermia prevention in operating theatres and recovery rooms), comprises a re-usable mattress (under the patient) and blanket (over the patient) warmed to a preset temperature.

METHODS

From November 02 to May 03, we used the Inditherm system for hypothermic patients presenting to the ED requiring active external re-warming. Core temperature, pulse rate and blood pressure were recorded at the start of re-warming and at 30 minute intervals until the patient left the department or core temperature measured over 35°C.

RESULTS

21 patients were included, 15 male & 6 female. Age ranged between 20 & 89. Temperature on presentation ranged from 25 to 34.6°C. 15 patients were re-warmed using both the mattress and blanket. Mean increase in temperature in this group was 1.12°C per hour (SD 0.86) over the first two hours, 6 patients had only the blanket applied. In this group mean temperature increase was 0.55°C per hour (SD 0.21) over the same period. The higher rate of temperature increase seen when using mattress and blanket was significant ($p=0.03$). Linear regression analysis indicated that increasing age was associated with lower rates of temperature increase.

CONCLUSION

The Inditherm system is an effective method of re-warming patients with hypothermia presenting to the ED. It is most effective when both mattress and blanket are used together.