

Oral presentation

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Hypothermia in injured patients – does it happen often?

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Introduction

Hypothermia is an independent predictor of increased morbidity and mortality in severely injured patients, mainly due to negative effects on coagulation [1]. Hypothermia can result from trauma itself, reduced tissue perfusion, pre-hospital interventions or lack of such. Efforts to increase body temperature by insulation and active re-warming can be life-saving if the risk of hypothermia in these patients is acknowledged. The aim of this study was to investigate the prevalence and severity of hypothermia in a trauma population.

Methods

Retrospective analysis of data collected prospectively from the trauma registry at St. Olavs University Hospital, Norway, from 1st Jan 2004 to 31st Dec 2006. Hypothermia was defined as temperature $\leq 36^{\circ}\text{C}$ [2].

Results

1237 trauma patients were identified during the study period. Among these, 67% (N = 827) had their temperature registered in the emergency department. Overall median temperature was 36.5°C (range 15–39.2), and 218 patients (26%) were hypothermic with a median tem-

perature of 35.6°C . Physician staffed transport (consultant anaesthetist) treated 138 patients (63%). See Table 1.

Conclusion

The prevalence of hypothermia could not be assessed due to no recording of temperature in a significant number of our patients. This suggests a less than adequate level of vigilance. Among patients with recorded temperature, a substantial number was hypothermic. It is necessary to address this issue along the entire chain of survival.

References

1. Ferrara A, MacArthur JD, Wright HK, Modlin IM, McMillen MA: **Hypothermia and acidosis worsen coagulopathy in the patient requiring massive transfusion.** *Am J Surg* 1990, **160**:515-518.
2. Soreide E, Smith CE: **Hypothermia in trauma victims – friend or foe (enemy)?** *Scand J Trauma Resusc Emerg Med* 2004, **12**:229-231.

Table 1:

	Severe	Moderate	Mild
Severity of hypothermia	<32°C	32–34°C	34–36°C
Number of patients (%)	5 (2)	21 (10)	192 (88)