

POSTER PRESENTATION

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Level of undertriage in a well established Trauma Registry in Denmark

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Background

It is universally accepted that patients suffering major trauma, may need a high level of immediate care on arrival at hospital to secure the best outcome. Triage is the allocation of injured patients to a suitable treatment level, and is also at our hospital based on a set of criteria which is based on pre-hospital values and findings. The trauma registry at Odense University Hospital (OUH), which registers the hospitals' admitted trauma patients, was established in 1996. Previously no studies have been done for this registry. Our aim was to assess the amount and character of undertriage and estimate the level of overtriage.

Methods

Retrospective analysis of data collected from OUHs list of patients admitted with ICD S- and T diagnoses in 2007. Inclusion criteria were ISS > 15, treated in intensive care unit > 2 days, dead within 30 days, or proximal penetrating injury. Overtriage was identified from the trauma registry of patients received by the trauma team, where the severely injured patient was defined as having ISS > 15.

Results

Potential undertriage if all inclusion criteria were followed was 22%. Undertriage if only ISS-score is used is 10%. Women had a higher risk of undertriage than men, and undertriaged patients were significantly older than correctly triaged patients. We discovered a high frequency of falls from low heights in undertriaged patients. 628 patients were admitted by the trauma team, with an overtriage of 86% assessed by ISS-score.

Conclusion

We found an undertriage proportion comparable to similar studies. Elderly patients and women had a higher risk of undertriage, which also has been found in other studies. We suggest that research should be concentrated on the reasons for this. We also found that if all inclusion criteria are used uncritically, it might overestimate undertriage. However, we suggest further research into whether the elderly and comorbid could reap benefit from medical participation early in the treatment process of even minor trauma.

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