

251 Adaptability of the Revised Trauma Score in Urgency Classification

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It is suggested that the application of the Revised Trauma Score (RTS) of Champion et al during triage in the event of a large number of field casualties. The classification into four urgency classes, as presently is advocated in the Netherlands, can be very problematic for the physician who must choose between the casualties within Urgency Class 1 (T1). A method to further differentiate within T1 will ensure this decision. After a description of the various trauma scores and their application, the adoption of the RTS is taken into consideration. This method should avoid time consuming physical examinations and mathematical calculations. Therefore, the T-classification has been divided into four urgency groups (G1–G4) based on the probable survival of the casualties, as described by Champion.

252 A New Approach to Trauma Assessment

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Introduction: Most major emergency medical services (EMS) textbooks and training programs in the United States stress rapid transport and short scene times as the standard of care for the management of major trauma. However, very little guidance is given to prehospital providers as to how best to accomplish this goal.

Objective: To teach paramedic students to minimize scene time by stressing teamwork and prioritization in decision-making.

Methods: In addition to a brief primary survey, paramedic students were taught to make all decisions regarding patient care by evaluating mechanism of injury, severity of injury, immediate life-threats, barriers at the scene, available personnel, and transport time. The students also received training in risk/benefit ratios of various prehospital procedures. Then, they were evaluated subjectively by senior instructors and by the medical director on their ability to use these concepts, and to assess and care for trauma patients under simulated conditions.

Results: The vast majority (52 of 53; 98%) of the students were able to learn this new system and demonstrate appropriate assessment and management of simulated trauma patients under a variety of rural and urban conditions. Using this approach, prehospital trauma care was individualized to each patient's particular condition and situation.

Conclusions: Paramedic students can be taught to use rational methods to assess and care for trauma patients by taking into account a variety of logistical factors and establishing priorities for their treatment decisions.

254 Physician Performance in Military Trauma Care: Field Quality Assessment

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Introduction/Objective: The study reports on the Israel Defense Forces Medical Corps' initiative to examine the feasibility and validity of various methods to assess physician performance in military trauma care.

Methods: The methods included were: a) debriefing by a senior traumatologist who also evaluated the physician; b) self-assessment by the medical officer; and c) written test. Five senior traumatologists experienced in military trauma were trained to perform the assessment within 24-48 hours of the occurrence of an incident in which sustained moderate to severe trauma injuries were observed.

Results: Seventy-five physicians who had been involved in the field care of trauma patients were assessed. Analysis of the results identify two domains for assessment: 1) knowledge; and 2) performance. The best method found for evaluating knowledge was the written test, not the peer review. However, traumatologist evaluation is a suitable method for assessing the performance of care and is highly correlated with the physician's self-assessment.

Conclusions: For a comprehensive assessment of field care, it is advisable to integrate the two methods: performance reviewed by an expert with a written knowledge test. In the future, the information gained from the assessment could improve the planning of in-service trauma training.

255 "Suspended Animation" Research for Otherwise Infeasible Resuscitative Traumatologic Surgery

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Background: Bellamy (U.S. Army Medical Research) suggested studies into "suspended animation" with drugs for use in the field. "Suspended animation" for resuscitative surgery under total circulatory arrest with hypothermia (Hth) was studied. This is meant for use of surgical resuscitation teams of (mobile) ICUs or emergency (field) hospitals, when victims with "uncontrollable" exsanguinating hemorrhage reach pulselessness.

Methods: In five sequential studies on 55 dogs, a new dog outcome model of hemorrhagic shock and emergency cardiopulmonary bypass (CPB)-induced circulatory arrest with Hth and blood washout was used. Recirculation and rewarming also were used with CPB.