

in different emergencies (including car accidents). The dense traffic situations pose a considerable obstacle in modern societies.

A total of 104 children (age from 2 months to 15 years) injured in Moscow and Moscow region were evacuated by medical helicopters to specialized hospitals of Moscow within the period (01 January 2001–31 January 2006). Evacuation was held from the place of accident in Moscow (64) and Moscow region (23), as well as from medical preventive institutions of Moscow region (17). Two patients were evacuated simultaneously in 11 cases.

The main causes of the injuries were car and road crashes (95); in 9 cases every day and street traumas were responsible. The majority of evacuated children had concomitant (49), multiple (7), or combined (6) traumas. The state of 49% of children was considered as “severe” and “extremely severe” and required infusion support in up to 28% of the children. Evacuation distance of varied from 3 to 135 km, evacuation duration lasted from 2 to 49 minutes. No patients died during air evacuation.

Using of medical helicopters in modern, big cities improves the quality of medical assistance by the rapid delivery of injured children to specialized hospitals. That fact is the leading role of survival.

Keywords: children, etiology; helicopters; trauma

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Session 4: System Developments: New Horizons and Evaluation

Chairs: Darren Walter; D. Wulterkens

Fire Service Medical and Prehospital Care Training in the United Kingdom

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Introduction: Fire and Rescue Services (FRSs) in the United Kingdom (UK) generally do not provide Emergency Medical Services (EMS). However, required response times for FRS often are shorter than are those for EMS, and firefighters frequently are in a position of needing to provide unsupported, immediate, medical assistance to casualties at the incidents to which they have responded to. The current level and nature of prehospital medical training delivered to UK firefighters was assessed in this study.

Methods: Questionnaires were mailed to individuals that have received firefighter, medical training at each of the 62 FRSs in the UK. Telephone follow-up was conducted 1–2 weeks after the questionnaires were sent. Investigator analysis of course syllabi were conducted.

Results: A total of 49 (79%) questionnaires were returned. Of these, 61% (30) FRSs train all firefighters in advanced prehospital care beyond statutory requirements (three FRSs to a nationally agreed standard: “First Person on Scene”); 13 train to statutory first aid requirements; and six train to different levels depending on employment status.

Thirty-five FRSs train firefighters in the administration of supplemental oxygen and six provide training in the use of automated external defibrillators. Standard training lasts a mean of 4.5 days (range 2–8). No FRS could guarantee that each appliance attending an incident would have a member of the crew trained in prehospital medical care.

Conclusions: The medical training and, therefore, the medical competencies of firefighters vary considerably across the UK. An adequate and appropriate level of medical training must be designated for all UK FRSs. In partnership with the Chief Fire Officer’s Association, a national standard should be established so that UK firefighters acquire standard medical competencies.

Keywords: emergency medical services (EMS); Fire and Rescue Services (FRSs); prehospital; standards; training

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Difficult Intubation on the Street or in Operation Rooms: Does it make a Difference for Experienced Anesthesiologists?

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Introduction: This study investigates the management of a difficult airway in a group of six experienced anesthesiologists in the operation room setting (ORS) and in the out-of-hospital setting as part of the Helicopter Mobile Medical Team (OHS-HMMT).

Methods: From 15 April to 31 July 2006, the anesthesiologists recorded on a validated registration form (RF) the number of intubation attempts, Cormack and Lehane score (C&L), subjective view of the difficulty of each intubation, aids and techniques used to facilitate intubation and the application of the Dutch difficult airway algorithm (DDAA). A difficult intubation was defined as a C&L score >3 score.

Results: Data from intubations of 67 (ORS) and 15 (OHS) patients were collected. In the ORS, 98.5% of intubations (n = 66) were successful, 91% at the first attempt. Six patients (9%) had a C&L score >3; two intubations (3%) were subjectively assessed as difficult. In the OHS, 100% of intubations were successful, of which 73% (n = 11) at the first attempt. Five patients (33%) had a C&L score >3; two (13%) were subjectively difficult. When the first intubation attempt was not successful, the anesthesiologist used cricoid pressure in 23% (n = 7), improved sniffing position in 20% (n = 6), increased elevator force in 16% (n = 5), or a gum elastic boogie in 13% (n = 4) of the cases. These techniques decreased the C&L scores for three patients. In all difficult airway situations, the DDAA was followed.

Conclusion: Experienced anesthesiologists perform similarly during intubations performed inside and outside the OR. The percentage of DDAA application in the OHS is greater than in the ORS.

Keywords: anesthesiologists; intubation; operation room; out-of-hospital setting

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