

Effect of Emulsion Open Therapy of Burns

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Objective: To evaluate the effects of using the Emulsion Open Therapy of Burns (EOTB).

Methods: From 01 January 1984 to 30 December 1996, our ward has had 71 cases of people who were hospitalized due to sustaining burns, were treated by EOTB. Twenty-three cases in whom the size of the burn wounds were the same, were treated by routine therapy. The ETOB was composed of 60 ml of isotonic saline or distilled water, 20 ml of 70# petrol, 20 ml of colza oil, 0.5 g of injectable chloramphenicol, and medicative soap. In a universal sterile container, these materials were mixed until it looked emulsified. After the burn wound was cleaned, the emulsion was put onto the wound, which was left open. This was used for superficial burns (1-2 degree small area) 3-4 times a day, and for deep thickness burns, 4-6 times a day. Most of them did not need skin grafting, as they can heal by themselves. The two groups of patients were compared for the restoration of health, improvement, effectiveness, and mortality.

Results: Sixty-six cases restored health by the use of EOTB, 4 cases were improving, 1 died, and the effectiveness rate was 98.6%. Fifteen cases were restored to health using routine therapy, 3 cases improved, 5 died, and the effectiveness rate was 78.3%. These differences were statistically significant ($p < 0.05$).

Conclusion: We believe that EOTB's curative effect is better than routine therapy. The material was easy to obtain, proved economical, and was easy to administer. We did not identify any toxic actions or side effects. Its use will be applicable in peace or wartime and in cities or villages.

Key words: burns; effectiveness; emulsion; emulsion open therapy; treatment; wounds

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Photo Documentation on the Scene of an Accident: A Complement to the Ordinary Documentation

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Introduction: In Sweden, 150 people are injured in traffic every day: seven of them become invalids, and two of them die. Each year, approximately 60,000 people are injured in traffic accidents, and 14,000 of them are so seriously injured that they must be hospitalised.

A traffic accident generates a great deal of energy, which reflects in the types of injuries sustained. Therefore, it is possible to identify characteristic injuries for different kinds of accidents, and with the help of a thorough injury-anamnesis, the physician can be led to the correct diagnosis. To make the assessment of the injuries easier at the accident site, several systems for classification of injuries have been developed to predict the outcome from different injuries.

Personnel in an ambulance service should be able to assess a patient, both primarily and secondarily, when the patient receives prehospital care. This primary assessment on the scene of accident provides the basis for the examination that the physician performs later in the emergency ward.

The type of vehicle involved, impact force, and type of injury are important parameters for a correct evaluation of the patients' condition. The ambulance crew is responsible for the medical information, but they also should inform the physician about the impact force caused by the collision. Visualization with photographs taken at the site could provide additional information that may be helpful for the physician's assessment of the injured patient. The aim of the study was to investigate the advantage of photo documentation at the accident site as a complement to ordinary patient records.

Method: When they arrive on the scene of accident, the ambulance crew from three different ambulance stations, take photographs using a digital camera in a sequence of 3 to 5 pictures according to given instructions. On arrival at the hospital, the pictures are transferred from the camera into a stationary computer for visualisation on a screen and printouts of high quality colour pictures. Thereafter, the pictures are stored with the ordinary patient records. The receiving physician can immediately get information about what the scene of the accident looked like. A first evaluation was made when the physician has answered a questionnaire ($n = 25$) that included both open and closed questions.

Result: An analysis of the first 25 traffic accident cases indicated that 16 (64%) of the receiving physicians thought that the pictures from the scene of the accident were an important aid for them in making a better assessment of the patient's condition. Some of the physicians reported that the pictures in several cases have led to complementary examinations that they did not think would have been done without this documentation from the accident site.

Nine physicians reported that the pictures didn't add anything. In five of the cases, this perception was related to poor quality of the photographs, in two cases the pictures came too late, and in two cases, the patient had died.

Conclusion: Photographs taken at the scene of an accident may be a helpful addition to the routine assessments of victims of traffic accidents.

Key words: ambulances; assessments; crashes; digital cameras; photographs; scene; traffic

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Kegworth: To Know History Is To Predict Future

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Problem: What anatomic injuries will occur within human organ system due to air accident?

Method: Kegworth air accident investigators present an AIS-scored material for all 126 persons involved. By computer-aided analysis, one can record the severity of injuries

and the number of organ systems involved for all casualties. Then by choosing an optional number of casualties that corresponds to the capacity of local air traffic, and the computer program will randomly compose a new list of casualties similar to that of the consultative group.

Result: It can provide a model for predicting the problems for which the hospital's disaster organization should prepare e.g., resource allocation and need of equipment and examples of probable anatomic injuries. Additionally, it is a valuable teaching tool for triage training, prediction of mortality, survival time, hospital length of stay, and disability.

References

The use of injury scoring in the evaluation of the Kegworth M1 aircraft. *J Trauma*, Vol.32, No 4, 211-215.

Key words: AIS-score; anatomic injury pattern; computing; prediction; teaching tool

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Preparation of Chartered Helicopters for a Disaster in Japan

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One of the major problems following the Hanshin-Awaji Great Earthquake of 17 January 1995 in the Hanshin area was that helicopters were not used effectively for the medical evacuation and transportation of the victims, even though there were many helicopters prepared for that use. This was related to the lack of knowledge by doctors that the helicopters could be used for the transportation of severely injured or ill patients from Kobe to undamaged facilities. The doctors never had used helicopters for the transport of patients.

Following the Great Hanshin-Awaji Earthquake, the Fire and Rescue Department of Government have intended to regularly use helicopters for the rescue and transport of emergency patients, but they still have not been used effectively. Hence, the Department of Health and Welfare and Labor of the Japanese Government organized a system to hire and use the chartered helicopters that are in possession of civil aviation companies for immediate use at the time of a disaster. This system is now being developed and soon will be contracted with the Tokyo Metropolitan Government, to prepare for the next big earthquake in the south Kantoh areas.

Key words: civil aviation; earthquake; evacuation; helicopters; private; transportation

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Using Catecholamines in Prehospital Settings by French Mobile Intensive Care Unit

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Introduction: Very few studies have been undertaken concerning the use of catecholamines in prehospital reanimation efforts. The aim of the present study conducted among mobile intensive care unit physicians is to estimate the indications for the use of different catecholamines in the prehospital stage of emergency care.

Methods: This study took place from March to November 2000, and involves 182 mobile intensive care units (MICU). Eleven regions were chosen at random among the 22 French regions. A telephone conversation took place with the physician on duty, chosen at random, in each of the 182 MICUs. During the conversations, each physician answered a preselected questionnaire concerning the use of different catecholamines according to the etiology of the state of shock.

Results: Of the 182 physicians questioned, 175 (96%) agreed to participate. Dobutamine and adrenaline are available in most of the MICUs. Four units did not have dopamine, and 42 declared having noradrenaline on board. During a hemorrhagic state of shock, all physicians said they used catecholamines if the systolic blood pressure remained <90 mmHg despite intravenous fluid therapy (IFT); 76 (43%) said they used adrenaline first, 72 (41%) said they used dopamine, 5 (3%) used noradrenaline, and 19 (11%) used dobutamine. In septic shock, 101 (58%) of the physicians used dopamine first, 34 (19%) used dobutamine, 27 (15%) used adrenaline, and 13 (7%) used noradrenaline. In the case of carbamate medication poisoning with blood pressure <90 mmHg despite IFT, 94 (62%) of the physicians used dobutamine first, 25 (16%) used dopamine, 22 (12%) used adrenaline, and 9 physicians said they didn't know. 158 (90%) MICUs are able to apply non-invasive blood pressure monitoring, 7 MICUs have the facilities for invasive monitoring of blood pressure in a pre-hospital scene.

Conclusion: Catecholamines are used often in reanimation for a state of shock in the prehospital stage. However, it seems necessary to rationalize their use with the help of protocols according to the etiology of shock.

Key words: blood pressure; catecholamines; criteria; hypotension; intravenous fluids; mobile intensive care units (MICU); prehospital; reanimation; shock states

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Videotape Recordings for Evaluation of Quality of Prehospital Trauma Care: First Experiences with a New Technique

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Introduction: Schneider *et al*¹ assessed the structural and procedural quality of the Mainz emergency medical services