Management of the Critically Injured Patient

Essay

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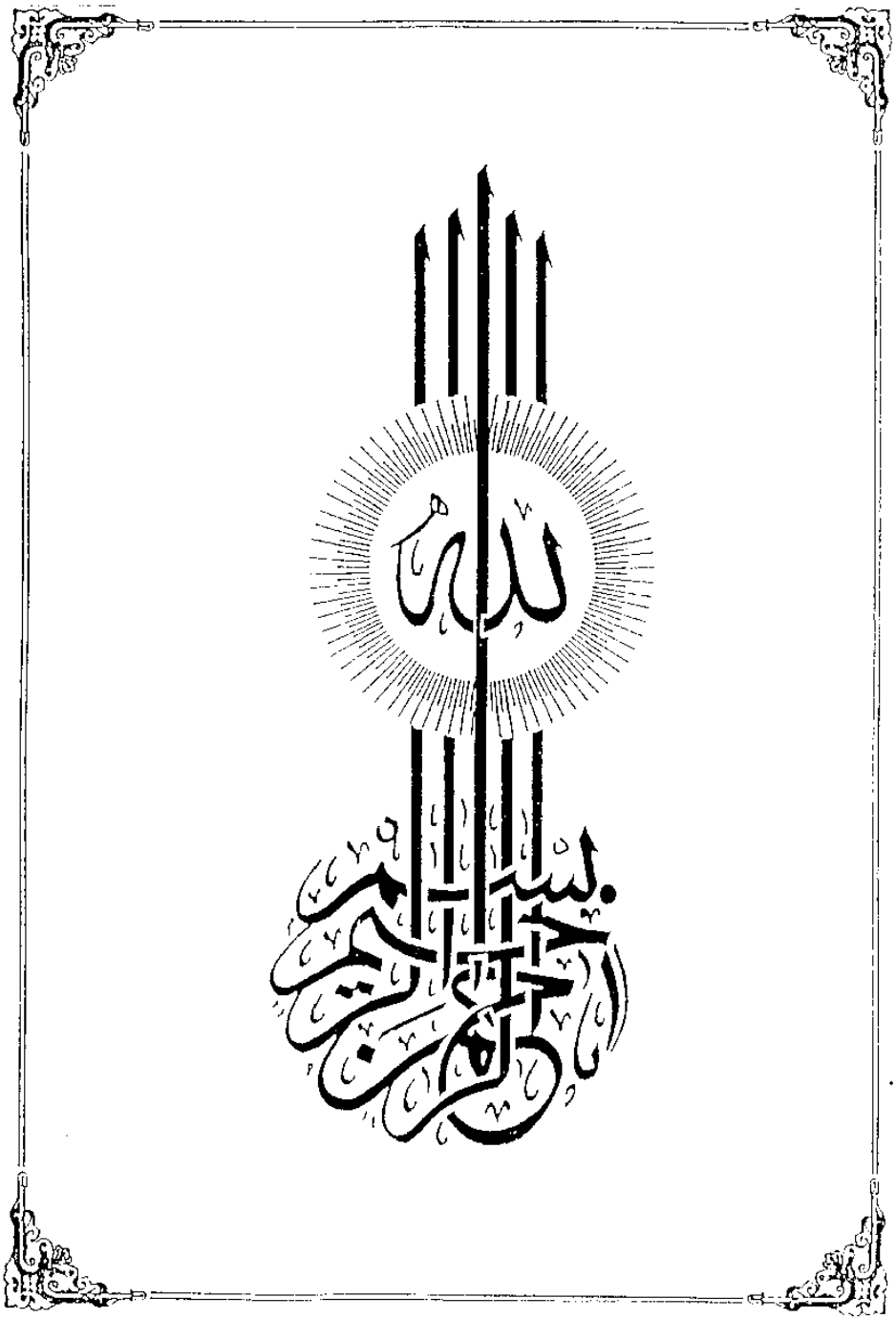

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Introduction

Introduction

There is no tasks in surgery more difficult or more important than the initial evaluation and management of a trauma victim.

Trauma is called "the neglected death" in the united states; as there it is the leading cause of death of people who are less than fourty four years old.. and, as over all, it is the third common cause of mortality (after cancer and cardio-vascular disease) trauma account for more than 150.000 deaths each year. More than 400.000 people are also permenantly disabled by trauma each year.

In Egypt. According to CAPMAS (Central Agency for people Mobilization and statistics). The total number of ambulance trauma cases in Egypt in the years 1990, 1991, 1992 were 674268, 867072 and 935939 respectively.

So one might feel there is a large increase in accidents in recent years, ascribed to the following causes; for more motor vehicles, capable of for greater speed using roads few of which are designed for modert transport; more people travel by all forms of transport, working population has grown in number; for greater usage of mechanical appliances, domestic, industrial and agricultural.

Mortality and morbidity of trauma can be medically prevented or improved by the development of an organized system for care of patients with trauma including the establishment of accident centers.

One-third of all deaths from trauma are medically preventable.

There is no doubt that trauma constitutes an important item of the medical care in our country; but to achieve the golden goal of proper management and care in our country. We are going to throw some lights on the ideal ways used in the management of trauma cases.

Aim of the Work:

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This essay is to be done hoping to put a plan for the management of critically injured patient, trying to decrease hazards of accidents to a minimum spotting light on this neglected but serious field of surgical emergency.

REVIEW OF LITERATURE

Ideal prehospital care

Resuscitation and evaluation of the trauma patient should begin at the scene. Firemen and ambulance attindants who have at least basic emergency medical technician training are the first responders ***(Dinerman & Maelin, 1984).***

The role of prehospital team in trauma is to:

1. Initiate treatment according to the established protocol.
2. Avoid further injury.
3. Establish radio - communication with the base hospital.
4. Provide rapid transportation to the most appropriate trauma facility ***(Jordan, 1983).***

The ideal prehospital phase, may be broken down into four major components:

1. Communication.
2. Notification and urgency.
3. On the scene management, and
4. Transportation ***(Burton et al., 1987).***

When an injury occurs, the system should be able to respond swiftly and effectively to save the patient's life. According to Cowly's a golden hour, a patient with a traumatic injury can be saved if the appropriate care

is given within 60 minutes post injury. Experience as in two world wars and the Korean and Vitnam conflicts clearly shows a direct relation ship between Mortality and interval between injury and treatment ***(Trunkey, 1983).***

Prehospital information helpful in preparing the emergency department trauma team.

* Patients Age, Six.
* Mechanism, magnitude of trauma.
* Time of injury.
* Blood presure, heart rate, respiratory rate.
* Overt and suspected injuries.
* Treatment under taken.
* Estimated time of arrival. ***(Champion, 1980).***

**** Communication:***

Control to any prehospital system is an advanced communication system that functions as an information exchange vehicle. From the first phone call to the final air-to-ground monitoring, it must serve not only to notify and dispatch but also to make available to all involved care personnel the following critical information of the extent of injury and urgency states.

The first contact most peaple have with an EMS system is its communication component. As communication provides the necessary link between the many parts of the system. Making possible a coordinated accurate and rapid response to the need for emergency medical services. The communication component should interface with other emergency and public service communication and be capable of expansion in times of major disaster because of the complexty of communications planning and the technical nature of the work required, ongoing monitoring by the communication committee of the EMS cauncil will be required ***(Burton et al., 1987).***

Operational communication linkes:

Operational communication is defined as the communication necessary to deliver medical care at the scence of the emergency to provide in transit medical care, and to coordinate available medical personnel and resources at a hospital to best serve the patient. The following four communication links illustarte the information flow in the system.

*** Link I:** Consumr to system:

The individual in need of emergency medical services reports directly to the EMS system. In U.S.A. Bell telephone company offers this service when communities in an area agree to be uniformly srved although commitment to auniversal number exists in most communities

implimentation should be the responsibility of the EMS council's communication committee.

*** Link II:** Dispatcher to EMT and vehicle:

The EMT and the vehicle are contact by the emergency dispatcher and sent to the scence of the emergency. The responsibility of emergency dispatching requires that this position be filled with a trained EMS dispatcher. The dispatcher alerts the hospital emergency room likely to receive the patient as to the kind of problem the EMT may be facing, this allows the emergency room to have a physician standing by to supervise the EMT at the scenc, in the meantime the dispatcher remains in communication with the vehicle ready to contact the police or fire department if necessary or to send additional EMTS and vehicles to the scene. If there is likely to be delay in excess of 10 minutes in the arrival of the EMT and vehicle. The dispatcher will call back to the scene and assume medical management to the degree possible, The dispatcher may be required to manage the activities of several emergency simultaneously with progression of the emergency run the EMT notifies the dispatcher of the vehicle's arrival at the scence and departure from it the dispatcher records these times on a cord with a time clock so that a complete record of the run in available finally, the dispatcher arranges for additional coverage by alerting other disignated stations to stand by in the event a second call comes from the same geographical area. As the medical care resource manager for the EMS system, the dispatcher should be at a