

## INTRODUCTION

The last two decades have witnessed a huge accumulation of new information on improving management and outcome in craniocerebral trauma. A sound scientific basis for treatment has developed over this period, and medicine is poised to make further major strides in recovery from brain injury (Becker, 1989).

Road traffic accidents are the most frequent cause of head injury, falls and injury related to work constitute the second most common causes, the relative frequency of each cause varies between different age groups and from place to place throughout the world (Lindsay and Bone, 1986).

Patients involved in road traffic accidents often sustain multiple injuries; and the mortality rate increases sharply with each additional organ system injured. Therefore systemic evaluation of a head injured patients is mandatory for appropriate localization of major lesion and for establishment of therapeutic priorities (Cooper, 1985 A).

Altered consciousness consists of abnormal behaviour in one or more of three functional areas: arousal, activity and awareness. Coma is the centre-piece of the broad canvas of altered states of consciousness, where arousal, and awareness are lost, with motor activity variously reduced and abnormal according to the depth of coma. A number of studies in several countries in the last decade have defined coma as a state of reduced responsiveness in which the patient's eyes are always closed, he does not obey commands, and he utters no recognizable words (Jennett, 1985).

Assessment of the degree of impairment of consciousness is vital for immediate management of severe head injured patients. So, Teasdale and Jennett, (1974) created the Glasgow Coma Scale in order to quantify the degree of impaired consciousness.

The Glasgow Coma Scale give reliable and consistent results when used by different observers who have widely varying degrees of experience, and the G.C.S is considered as an international standard for grading the severity of head injuries (Starmark, et al 1988; Jennett, 1985).

Now, computed tomography (C.T) scan becomes the primary diagnostic imaging procedure in the evaluation of patients

following head trauma. It permits the rapid and safe detection and localization of intracranial hematomas, brain contusion, edema, foreign bodies and serial computed tomographic scan aid the diagnosis of subsequent complications (Zee et al, 1985).

Management of post traumatic unconscious patients is aiming to prevent secondary brain damage caused by raised intracranial pressure, intracranial haematomas, brain swelling, brain shift, systemic hypotension and hypoxia. While the primary impact injury to the brain can not be repaired (Miller et al, 1981).

Jennett and Bond, (1975), proposed a scheme to describe outcome from head injury, the resultant Glasgow Outcome Scale, which included five categories covering the range of different degree of patient's disability, it includes:

1. Good recovery:

Patient is totally independent and able to return to previous level of employment.

2. Moderate disability:

Patient is independent and may be able to regain some form of occupation with mild physical or behavioural impairment.

### 3. Severe disability:

Patient is dependent on others for the activities of daily living. The actual disability may be predominantly mental or physical.

### 4. Vegetative state:

Patient remains unresponsive and speechless for weeks or months until death.

### 5. Death:

The majority of deaths from severe head injury occur during the first week post injury.