INITIAL MANAGEMENT OF ACUTELY INJURED PATIENT

Trauma is has reached an epidemic proportion, it is defined as tissue damage due to transfer of energy. It is a time related event and it is often a story of reaping what you sow. This is one reason why the word accident in phrase road traffic accident has been changed to crash or injury because often times the event leading to the insult or occurrence may be preventable if the victim had just done what was prescribed or what is supposed to be the correct safety or preventive measure.

The initial management of the patient is crucial to the morbidity and mortality rate in the management of road traffic injury. The introduction of the ATLS advanced trauma life support system of care was conceived and introduced with the aim to reduce the occurrence of preventable deaths. The basic aim is to find and treat first what kills the victim first. It was noticed that one out of every 4 deaths were preventable if only the causes of early demise are sought for and halted or reversed early in the management of the trauma victims.

The present volume will be a peripheral discussion of the primary survey only. Deeper discussion will be presented on trauma management subsequently.

The primary survey is a common clinical oral question, and deservedly so because as has been earlier mentioned the initial management is very crucial to patients survival and total outcome. The question presented to the examinee is often a clinical scenario of a patient involved in road traffic injury, a fall from height or who has sustained burns injury the question goes “ how will you approach the initial management or how will you treat this patient “. It will be a mistake to immediately attend to the exact system or region involved in the injury even though recent documentations suggest cardiovascular perturbation as a determinant of outcome when involved the approach is still the good old ABCDE because problems of the airway and difficulty with breathing rarely permit and allowance of more than
5-6 minutes before the travel to the great beyond: Airway and breathing problems certainly kill faster than cardiovascular perturbation in the context of road travel injury

A- AIRWAY AND CERVICAL SPINE CONTROL
B- BREATHING
C- CIRCULATION
D- DISFUNCTION OF CNS
E- EXPOSURE AND ENVIRONMENTAL CONTROL

The primary survey highlighted above represents the proceedings in the emergency unit. For the trauma site the sequence of immediate care which is the “E” evaluation component of the S.A.F.E is ABCF the D and E are omitted

For practical purposes the initial step may be to attempt communicating with the patient “hello, how are you? Where does it hurt? If the patient can respond appropriately then the airway must be patent and the patient is breathing at that time, in addition there is probably no severe neurologic dysfunction. If the airway is not patent or there is at that time significant compromise of the breathing then the patient may not be able to phonate and will probably respond with a sign or attempt to “catch a breath “ before responding to you

For the C–spine control. The trainee often forgets this concluding part of the A in clinical exams. This should not be forgotten because if there is C-spine injury with neurologic deficit then spontaneous respiration will be abolished; there will be paralysis of the diaphragm.

Still on the C–component, the patient’s neck should be in neutral position with application of cervical collar. In patients that have head injury there is an associated spinal injury in about 10-20 percent of presentations
If the patient is unconscious or unresponsive, then, check the airway by feeling the waves of expired air against the back or your hand or your check, then look for the chest excursion. Maintain the cervical spine in neutral position as earlier mentioned.

For the C- stop any obvious bleeder and check for carotid pulsation. In children the brachial artery pulsation is checked rather than the carotid pulsation.

For the D- dysfunction of CNS, remember this is dysfunction of central nervous system, it does not stand for “disability”, and it does not stand for “drugs”. If the trainee remembers the C component of the Airway, this is the next point where the trainee may become stuck or lost during the clinical discussion. The method of assessment of the CNS dysfunction may be by using the AVPU or the Glasgow coma score, the former is preferred because it is short and can be completed along with the other aspects of the primary survey simultaneously within a few minutes.

The E stands for exposure and environmental control; exposure to assess the patient from head to toe and environmental control is to ensure the patient is neither too warm nor cold. A cold environment will compound the metabolic demands (thermogenic behavior); while a warm environment will incite vasodilation hence compound the shock state.