CHAPTER 7
MEDICAL CAUSES OF UNCONSCIOUSNESS

STROKE (CEREBRO-VASCULAR ACCIDENT)

Stroke or Cerebra Vascular Accident (CVA) is the common term used to describe the damage suffered when there is a sudden interruption in the blood supply to the brain. This damage may range from minor to severe. CVAs are caused by two mechanisms; the blocking of an artery by a blood clot, or the bursting of an artery within the skull which causes compression of the brain.

PROVISIONAL DIAGNOSIS OF STROKE

HISTORY
a. patient usually, but not always over 50 years
b. often has previous History of high blood pressure
c. may have had smaller strokes or problems in the past

SIGNS
a. loss of bladder and bowel control
b. bruising around eyes
c. loss of movement on one side of the body (Hemiplegia)
d. loss of power on one side of the body (Hemiparesis)

SYMPTOMS
a. headache
b. nausea
c. confusion
d. speech disturbance
e. loss of balance
f. visual disturbance including a dislike of bright light

TREATMENT OF STROKE

1. Approach to the Incident
2. Call ambulance
3. Check Airway, breathing and casualty's perfusion status
4. Full examination
5. Keep casualty warm
6. Take and record observations
EPILEPTIC FIT

Epilepsy may be defined as a brief disorder of cerebral function often associated with an altered conscious state and accompanied by sudden, excessive discharge of cerebral neurones which cause spasm of the muscles.

PROVISIONAL DIAGNOSIS OF GRAND MAL EPILEPTIC FIT

HISTORY
a. patient is heard to cry out and collapse
b. local spasm or convulsions are reported
c. patient often carries medical warning card, bracelet or pendant

SIGNS
a. loss of consciousness
b. tonic (spasm)
c. cry may be heard
d. convulsions may be seen
e. patient often incontinent of urine and faeces
f. patient seems drowsy or very sleepy and confused

SYMPTOMS
a. patient may be aware of aura
b. patient may feel drowsy
c. patient may suffer hallucinations and visual disturbances

TREATMENT OF SERIOUS EPILEPTIC FIT

1. Approach to the Incident - remove dangers and leave casualty alone
2. Check airway (not possible during convulsion)
3. Call ambulance
4. Check carotid pulse
5. Check for haemorrhage
6. Full Examination
7. If casualty regains consciousness and wishes to leave:
   - ensure they are aware of their surroundings
   - ensure they understand what has happened
   - ensure they know how they are getting home

STAGES OF AN EPILEPTIC FIT

PRODROMAL STAGE Patient feels the onset of symptoms indicating a fit. These symptoms are very much like the symptoms that a migraine sufferer experiences prior to the migraine attack. These symptoms may include visual disturbances, auditory hallucinations, taste sensations in the mouth or painful muscle contractions in the abdomen or other parts of the body.

AURA Uncommon, and often very vague feeling, that a fit is about to occur.

TONIC STAGE Loss of consciousness followed by spasm begins and there is often a high pitched cry as the air in the lungs is forced out of the chest through the spasm vocal cords. This stage lasts about 20-30 seconds and the lack of effective respiration leads to cyanosis.

CLONIC STAGE Strong spasms alternate with relaxation and it is at this point that the casualty often loses control of the bladder and bowel and froths at the mouth.

SLEEPINESS The casualty becomes relaxed and comatose and may even fall asleep for up to 30 minutes or more before regaining consciousness. The casualty may remain confused for some time following a return to consciousness.
DIABETES

Diabetes is a systemic disease which prevents the pancreas from producing enough insulin for the body to metabolise sugar. The problems that affect diabetics are low blood sugar, an emergency and high blood sugar which is often readily identified and treated by the diabetic casualty’s family doctor.

LOW BLOOD SUGAR (HYPOGLYCAEMIA)

Low blood sugar is the most common problem seen by the first aider and is usually caused through a missed meal, over-exertion or overdose of insulin. Low blood sugar causes rapid unconsciousness, brain damage and death.

PROVISIONAL DIAGNOSIS OF LOW BLOOD SUGAR

HISTORY
a. Patient is known to be a diabetic
b. Patient has missed a meal
c. Check for medication, warning card, bracelet or pendant

SIGNS
a. Altered conscious state - mood swings
b. Cold, clammy, pale skin
c. Pale, cold, wet skin
d. Dilated pupils
e. Muscle tremor

SYMPTOMS
a. Headaches

TREATMENT OF UNCONSCIOUS DIABETIC

1. Approach to the Incident
2. Never give any food or fluids by mouth
3. Turn the person on their side
4. Rub honey on inside of lips
5. Call an ambulance

TREATMENT OF CONSCIOUS DIABETIC

1. Approach to the Incident
2. Rest and reassure casualty
3. Give casualty some sugar quickly such as:
   - 5 - 7 jelly beans, a glass of soft drink (not diet), glass of fruit juice or 2-4 teaspoons of sugar or honey
4. If the casualty doesn’t feel better in 5-10 minutes give them some more sugar.
5. Then get the casualty to eat some carbohydrate (starchy) food such as:
   - piece of fruit, glass of milk, sandwich or 2-4 dry biscuits
6. Call an ambulance

HIGH BLOOD SUGAR (HYPERGLYCAEMIA)

High blood sugar is not often seen by first aiders because it takes a relatively long period to become a problem and is usually treated by the casualty’s medical practitioner.