# Unconsciousness Coma

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#### Intracranial causes

Vessels: head injury, bleeding haematoma, anomalies, ischemia

Infection – meningitis, encefalitis, abscesus

Tumors

Epilepsy

#### **Extracranial causes**

- Poisoning (CO, alcohol, drugs)
- Metabolic diseases (DM, hypothyreosis)
- Systemis failure- liver, kidney
- Stop of breathing and circulation in 30 seconds

#### Level of consciousness

1. Somnolence drowsiness

2. Sopor lower level of consciousness reaction to pain

3. Coma deep unconsciousness

# Level of consciousness

- A Alert, respond to questions eyes are open
- V Voice, respond to voice, obey commands
- P Pain, respond to pain
- U Unresponsive to any stimulus



Seek the cause Monitor vital signs Opening the airways- tilt his head back lift the chin Checking breathing Recovery position, injury- the same position AED CPR Avoid aspiration, nothing orally Transport



# **Recovery position**

Faintness- syncope

Short loss of consciousness

Causes: bradycardia, arythmia postural hypotensis vasovagal faintness



Horizontal position Raising of legs Fresh air Fluids

# Extracranial unconsciousness

# **Diabetic coma**

DM- insufficient production of insulin Hyperglycaemia, osmotic diuresis Loss of fluids Metabolic acidosis, aceton Loss of potassium and natrium

Brain is depedent on plasmatic glucose Utilisation of glucose in brain is not controlled by insulin

# Signs

Polyuria, polydypsia Dry, warm skin, dehydration Rapid pulse and breathing **Excessive thirst Deep breath** Fruity sweet breath- aceton in the breath Nausea and vomiting Unconsciousness

### Mortality 50 %

# Hypoglycaemia – coma

Causes: insulin- sugar balance is incorrect high doses of insulin, alcohol

Signs: Weakness, faintness, confusion Sweating with cold clammy skin Rapid pulse, muscle tremor Deteriotating level of response Feels hungry

First aid in both- sugar, glucose fluids

### Hepatal coma

Renal coma (uraemia)

Hyperthyreosis

Hypothyreosis

# Death of brain

History of brain lesion Areflexia, apnoe from the brain stem No reaction of pupils No reaction to pain No breathing for 10 minutes after stopping of ventilation with oxygen  $EEG - \frac{1}{2}$  hour isoelectric line Brain angiography – no vascularisation above the base

# Signs of death

- Patches (6-12 hours)
- Cold body (1°C / hour)
- Stiffness (after 6-12 hours)
- Decomposed body (after 2 days)