

# 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)

Systemic failure- liver, kidney

Stop of breathing and circulation  
- in 30 seconds



# Level of consciousness

A Alert, respond to questions  
eyes are open

V Voice, respond to voice, obey commands

P Pain, responds to pain

U Unresponsive to any stimulus

# First aid

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



# First aid

Horizontal position

Raising of leggs

Fresh air

Fluids

# Extracranial unconsciousness

# Diabetic coma

DM- insufficient production of insulin

Hyperglycaemia, osmotic diuresis

Loss of fluids

Metabolic acidosis, acetone

Loss of potassium and sodium

Brain is dependent on plasma 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- acetone in the breath

Nausea and vomiting

Unconsciousness

Mortality 50 %

First aid- application of insulin

# 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

Deteriorating level of respond

Feels hungry

First aid- sugar, glucose fluids

Hepatal coma

Renal coma (uraemia)

Hyperthyreosis

Hypothyreosis

# Death of brain

History of brain lesion

Areflexia, apnoea from the brain stem

No reaction of pupils

No reaction to pain

No breathing for 10 minutes

after stopping of ventilation with oxygen

EEG – ½ hour isoelectric line

Brain angiography – no vascularisation  
above the base

# Signs of death

Patches (6-12 hours)

Cold body ( $1^{\circ}\text{C}$  / hour)

Stiffness (after 6-12 hours)

Decomposed body (after 2 days)