

# Acute poisoning

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# Acute poisoning

It is an intoxication by venoms

A poison can cause permanent or temporary damage

Man- made    poisons

Natural        poisons

1. inhaled
2. swallowed
3. absorbed through the skin
4. injected through the skin s.c., i.m., i.v.
5. splashed into the eye

# Signs

Vary with the type of poison  
They develop quickly or over a couple of days

Diminished breathing

Arrhythmia, hypotension

Diminished GI activity

Rhabdomyolysis, renal failure

Impaired liver function

Oedema of the brain, seizures, unconsciousness

# First aid

Stop action of the poison

Monitor vital signs

Ensure the poison for further examination

Transport to hospital

# Consequenses

Hypoxia

Edema of the brain

Renal failure

Liver failure

# Swallowed poisons

Chemicals, drugs, corrosive substances

## Signs

History of ingestion

Nausea, vomiting, abdominal pain

Burning sensation in the face and extremities

Seizures

Impaired consciousness

## First aid

To maintain open airways, breathing, circulation

To identify the poison

In a case of corrosive substances- cold milk or water

Urgent removal to hospital

# Medicines

- benzodiazepins, barbiturates

## Signs

Fatigue, difficult speech, diminished breathing

Dizziness, nausea and vomiting, hypotension

Hypothermia, impaired consciousness

## First aid, management

Induce vomiting (fingers into the throat, salty water, ipeca)  
hypertonic solution of saline)

Irrigation of the stomach

Enema

# Medicines

- paracetamol

## Signs

Nausea, vomiting, abdominal pain

Pale, sweating, redness of the skin

Hypotension

Haemolytic anemia, liver failure

## First aid, management

Induce vomiting (fingers into the throat, salty water, ipeca)  
hypertonic solution of saline)

Irrigation of the stomach

Drips with saline

N- acetylcystein



# Botulism

Toxins from *Clostridium botulinum* A, B, E  
in tinned meat or contaminated meal

## Signs

After 18-36 hours weakness, head nerve palsy  
Feeling of dry mouth, disturbance of vision  
Nausea and vomiting, convulsion, diarrhoea  
Bulbar paralysis (dysarthria, dysphagia, diaphragm palsy)

## First aid

Induce vomiting, irrigation of stomach, CPR

## Management

Ventilation, antitoxin

# Mushroom poisoning

Amanita phalloides

- amanitins: peptids causing liver failure
- phalloidins: peptids causing nausea, vomiting and diarrhoea

Signs

After 6–12 hours sweating, watering from the eyes

Salivation, miosis

Abdominal pain, vomiting, convulsions, haemorrhagic diarrhoea

Dizziness, oliguria, jaundice, coma

Mortality: 50 %

First aid

Induce vomiting, irrigation of stomach, CPR

# Inhalation of fumes

## Carbon monoxide

- motor vehicles, chimney fumes, emissions from defective heaters

## Carbon dioxide

- underground tanks, wells

## Smoke

- fire smoke, may contain toxic fumes

## Solvents and fuels

- cleaning fluids, glues, camping gas

# Inhalation of fumes

## Signs

Headache, confusion

Nausea and vomiting, diarrhoea

Coughing, difficult breathing

Chest pain, cyanosis, pale or grey glue skin

Tachycardia, flat and fast breathing, seizures

Oedema of lungs

Dizziness, desorientation

Impaired consciousness

Unconsciousness

Carbon monoxide has higher affinity to haemoglobin than oxygen

It produces carbonylhaemoglobin CoHb

This leads to tissue hypoxia

# First aid

Be careful to enter the place with fumes

- open the door, open the window

Be careful not to breathe the fumes yourself

Remove the casualty from the place into fresh air

Encourage the casualty to breathe normally

Monitor vital signs

CPR

# Animal bites

Sharp pointed teeth

Damage of tissues, crush of tissues

Bacterial infection

Infection of rabies

Infection of tetanus

## First aid

Wash the wound thoroughly with warm water and soap

Sterile dressing

Send to hospital

Tetanus immunisation, antirabies injections

Surgical management

# Insect sting

A sting from bee, wasp

## Signs

Pain at the site of the sting

Redness and swelling

In the mouth it can obstruct the airways

## First aid

In the mouth- ice cube to suck, cold water to sip

To brush or scrape it off sideways

Not to use tweezers

To raise the affected part

Cold compresses

Risk of anaphylactic shock- adrenalin

Medical advice



# Tick bite

Ticks, scorpions, other spiders

Ticks suck the blood, carry diseases

## First aid

Use a tweezer

Grasp as much as to the skin

Gently pull out and rotate

Remove completely

Do not use an oil or butter

Allergic reaction

Obstruction of airways

Medical advice

# Snake bite

Viper, adder, cobra

In 20 % they are venomous

## Signs

A pair of puncture marks

Sever pain, redness and swelling

Nausea and vomiting

Disturbed vision, colour vision

Metal taste, anesthesia around the mouth

Sweating, weakness

Bleeding from jaws, convulsions

Haematuria, renal failure, disturbed breathing

Shock

# First aid

To prevent venom spreading

Urgent removal to hospital

In a case quick transport:

pressure bandage- extended up the limb  
immobilisation, elevation, sterile dressing

Do not use tourniquet

In a case of a long journey to hospital:

incision or to slash the wound with a knife  
or try to suck out the venom

Sterile dressing