



# Allergies and Poisoning For CHO/SN





# ANAPHYLAXIS AND ACUTE SKIN RASH





# INTRODUCTION

Condition where our body reacts to a **foreign substance** in the body-  
inhaled/ ingested.

## Symptoms :

- Serious allergic reaction- rapid in onset, death.
- Symptoms: minutes to hours
- An itchy rash
- Throat or tongue swelling
- Shortness of breath
- Vomiting, light-headedness
- Low blood pressure



# TRIGGERS

- Some food (especially peanut, eggs, nuts & shell fish)
- Medication, such as antibiotics (especially penicillin & sulpha), aspirin & ibuprofen
- Insect stings or bites
- Physical stimuli, such as pressure, cold, heat, exercise or sun exposure.
- Blood transfusion
- Latex
- Bacterial infection, including UTI & streptococcal infection
- Viral infection, including common cold, infectious mononucleosis & hepatitis.
- Pet dander
- Pollen
- Some plants, such as poison oak & poison ivy



# ANAPHYLAXIS

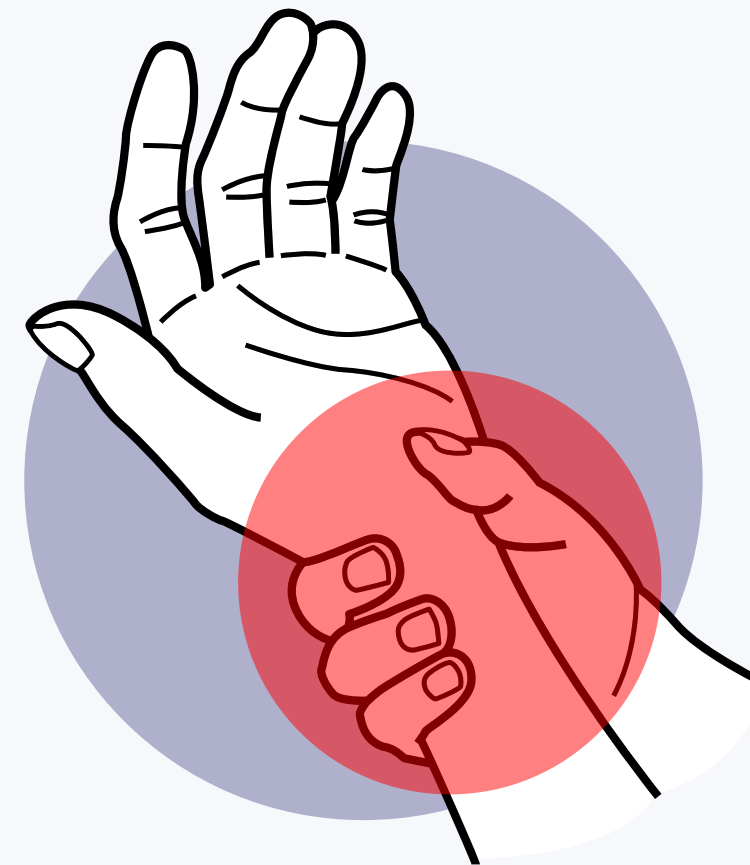
## Signs and Symptoms-

- Anaphylaxis- many different symptoms over minutes or hours with an average onset of 5 to 30 minutes if exposure is intravenous and 2 hours if from eating food.
- The most common areas affected include: skin (80–90%), respiratory (70%), gastrointestinal (30–45%), heart and vasculature (10–45%), and central nervous system (10–15%) with usually two or more being involved.



# Typical Symptoms

- **Generalized hives**
- **Itchiness**
- **Flushing**
- **Swelling (Angioedema)**



# MANAGEMENT



## First-Aid Treatment-

- Administration of epinephrine (injection adrenaline (epinephrine) 1:1000 dilution intra muscular mid anterolateral thigh).
  - Antihistamines and steroids (for example, dexamethasone) often used as adjuncts.
  - Don't give intravenous because it needs further dilution of drug
- Anaphylaxis is a **medical emergency**





# URTICARIA

- A skin rash triggered by a reaction to food, medicine or other irritants.
- Usually self-treatable, self-diagnosable, lab tests or early imaging required.
- Short term – resolves within days to week
- **Two types of urticaria:**
  - Short lived – acute
  - Long term – chronic





# CLINICAL FEATURES

- Raised itchy bumps (red or skin-coloured)
- Blanching (when pressed, the center of a red hive turns white)
- Symptoms can last anywhere from minutes to months or even years.
- Hives can appear on any area of the body, may change shapes, move around, disappear & reappear over short period of time.
- The bump – red or skin coloured ‘Wheels’ with clear edge usually appear suddenly and go away just as quickly.
- Blanching

# FIRST-AID TREATMENT



- Avoid known trigger.
- Use antihistamines, steroids (injection Avil {Chlorpheniramine maleate} 25mg IV stat, injection Hydrocort 100mg IV stat).
- Oral antihistamines (Levocetirizine).
- Cold compresses or anti – itch solutions to ease the symptoms.
- If breathless then in adrenaline (epinephrine) 1:1000 dilution IM
- **If symptoms do not improve immediately shift to emergency higher centre.**
- History taking





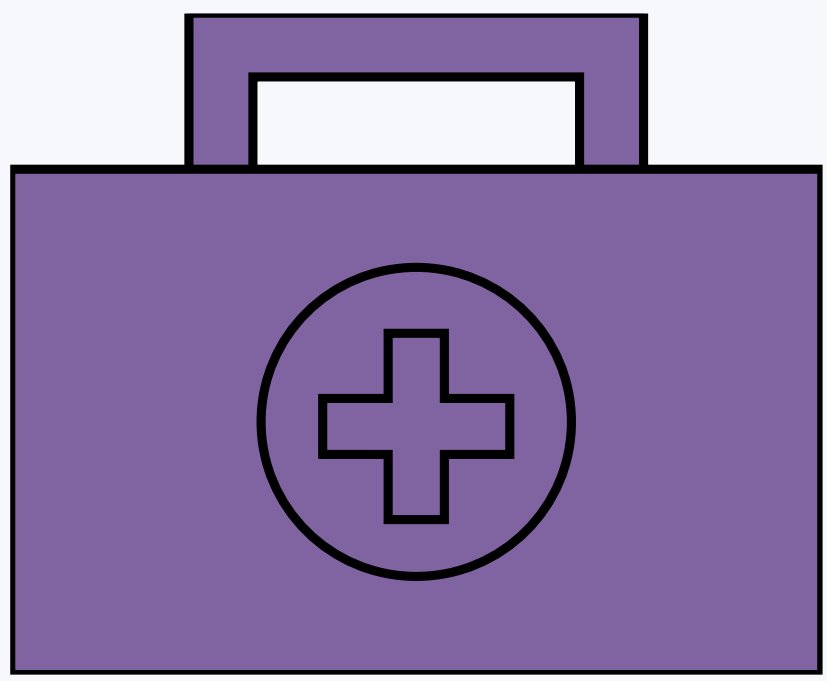
# POISONING



# INTRODUCTION

- Harmful substances found either in natural environment or chemicals
- When ingested/ inhaled in sufficient dosages, either accidentally or for suicidal purposes → fatal
- Cause of death- loss of airway protective reflexes either caused by aspiration of gastric contents, respiratory distress or flaccid tongue
- All cases of poisoning presented before → should be assumed to have **compromised airway**
- Role of CHOs
  - Identification of poisoning
  - Provision of anti-dote
  - Stabilizing the victim
  - Facilitating referral





# TYPES AND FIRST AID TREATMENT



# ACID POISONING



- Suicidal or homicidal or accidental
- Nitric, sulphuric, hydrochloric, carbolic, oxalic and acetic acid commonly seen in households as phenyl, floor cleaners etc.

## Clinical Features:

- Burns on or around the lips
- Burning in the mouth, throat and stomach often followed by heavy vomiting.
- Absence of ulcers or injuries in mouth or throat does not rule out corrosive poisoning
- Diarrhoea and intense thirst
- In severe cases, patient may be unconscious and have signs and symptoms of asphyxia, shock or seizure





## TREATMENT

- General- Supportive
- Do Not use NG tube or try to remove contents from stomach, as it may further cause more corrosive injury
- Shift the casualty immediately to hospital



# ALKALI POISONING



- Suicidal or accidental
- Ammonia, potassium hydroxide and sodium hydroxide, bleachers, detergents, washing soda.

## Clinical Features:

- Similar to acid poisoning
- Membrane of the mouth may be white and swollen
- Soapy appearance in the mouth
- Absence of ulcers or injuries in mouth or throat does not rule out corrosive poisoning.
- Abdominal pain, Vomiting may contain blood and mucous







## TREATMENT

- **GENERAL: SUPPORTIVE**
- **SPECIFIC:**
  1. Do not induce vomiting.
  2. Do not put nasogastric tube or try to remove contents from stomach, as it may further cause more corrosive injury.
  3. Shift the patient immediately to hospital



# DHATURA

## (SAFED DHATURA AND KALA DHATURA)

### Clinical Features:

- Bitter taste, dry mouth and throat
- Burning pain in the stomach
- Difficulty in swallowing and talking
- Giddiness, Ataxia, intoxication
- Dry hot skin, rise in body temperature
- Delirium- tries to run away from bed, picks up bed clothes, tries to pull imaginary threads from the tips at his fingers and develops dreadful hallucinations of sight and hearing, convulsions & coma.



**Treatment:** Same as above



# ACONITE

## (MITHA ZAHAR, DUDHIA VISH)

### Clinical Features:

- Severe burning and tingling of lips, mouth, tongue and throat
- Dysphagia
- Salivation
- Vomiting
- Abdominal colic
- Vertigo
- Muscle spasm and twitching
- Impairment of vision

**Treatment:** Same as above





# MUSHROOM

## Clinical Features:

- Burning of throat and stomach.
- Pain in abdomen
- Vomiting and diarrhoea
- Urine may contain blood
- Cyanosis, rapid pulse, convulsions
- Headache, giddiness, cramps
- Visual disturbances
- Coma

**Treatment:** Same as above





# METAL POISONING

## LEAD

- Metallic taste in mouth
- Nausea and abdominal pain
- Vomiting
- Stools may be bloody dark in colour
- Headache, drowsiness, cramps, convulsions, numbness
- In chronic poisoning a blue line is seen on gums

**Treatment :** Same as above



# METAL POISONING

## MERCURY

- Metallic taste in mouth
- Burning pain in mouth and stomach
- Tongue and throat is corroded with grey white coating
- Nausea and vomiting
- Stools may be bloody dark in colour
- Headache, convulsions, numbness

**Treatment :** Same as above

# ORGANIC CHEMICAL POISONING

## DDT

- Nausea, vomiting, vertigo, tremors
- Convulsions
- Coma
- Respiratory failure

## INSECTICIDES

- Pain in abdomen
- Vomiting
- Tremors
- Ataxia
- Convulsions



# ORGANOPHOSPHORUS COMPOUNDS



- Used as pesticides and insecticides in agriculture and homes
- Very lethal, used in suicidal and homicidal purpose
- Characteristic smell
- Nausea and vomiting, pain in abdomen, diarrhoea
- Lacrimation, sweating and bronchial secretions
- Difficulty in breathing
- Blurring of vision
- Pin-pointed pupil
- Cramps
- Convulsions, coma







# CYANIDE

- Very lethal
- Used as inhalation or ingestion
- Headache, dizziness
- Nausea, hypotension
- Dyspnoea, drowsiness
- Convulsions, cyanosis
- Unconsciousness
- Foam in the mouth
- Respiratory failure
- Characteristic smell of **bitter almonds**
- Assess hemodynamic stability, resuscitation as indicated
- **Treatment:** Shift the patient to hospital immediately



# ALCOHOL POISONING

- Smell of alcohol
- Vomiting, Convulsions
- Slurred speech and Incoordination
- Double vision and Visual impairment
- Flushing of face
- Rapid pulse
- Dilated pupils
- Shallow breathing
- **Treatment:** Shift the patient to hospital



# MANAGEMENT

- OP poisoning, however common, is also extremely fatal and the principles of treatment include:
- Decontamination

## Reversing the effect of OP

- Any patient with significant Hypoxia (reduction in oxygen availability to body tissues), Bradycardia (resting heartbeat of below 60 Beats per Minute (BPM)) and/or Hypotension (Low blood pressure).
- Repeat Atropine every 5 minutes until secretions are minimal (Clear lungs, heart rate  $> 80$ BPM, adequate Blood Pressure)
- Observe the victim. Refer if the victim's condition does not improve



# Thank You

