



“बेटी बचाओ, बेटी पढ़ाओ”

## **JAYOTI VIDYAPEETH WOMEN'S UNIVERSITY, JAIPUR**

### **FACULTY OF HOMOEOPATHIC SCIENCE**

Name of Faculty : JV'n Dr Richa Sharma, Asst. Prof.  
(Deptt. Of FMT)

Program : BHMS II Year

Course Name : FORENSIC MEDICINE AND TOXICOLOGY

Session No. & Name : 1. SULPHURIC ACID POISONING

#### **Program Outcome-**

- The important objective of the BHMS course is to impart thorough and comprehensive training to the candidate in various aspects of homoeopathy during completion of course students shall be able to perform with proper skill and knowledge of homoeopathy

#### **Course Outcome-**

- Able to understand the basic concept of the subject and its importance.
- Aware of inquest, legal and court procedures applicable to medico-legal and medical practice, code of ethics, duties and rights of medical practitioner, duties towards patients and community, punishment on violation of code of ethics, various forms of medical negligence, medico legal post-mortem.
- To understand the relationship of Forensic Medicine & Toxicology with other Homoeopathic subjects like Homoeopathic Pharmacy, Homoeopathic Materia Medica, Organon of Medicine and Homoeopathic Philosophy & Psychology, along with allied subjects like Anatomy,

Physiology, Surgery, Obstetrics & Gynaecology, Practice of Medicine due to integrated way of teaching the subject.

## **SULPHURIC ACID POISONS**

Definition- corrosives are a group of chemicals that have the capacity to cause tissue injury on contact by a chemical reaction. They most commonly affect the gastrointestinal tract, respiratory system and eyes. The estimate prevalence of corrosive poisoning is 2.5-5% while the morbidity is above 50% and the mortality is 13%. Usually corrosives are ingested in adult by suicidal or for medicinal purpose.

### **Types:**

1. Strong acids and alkalis
2. Concentrated weak acids and alkalis
3. Oxidizers
4. Alkylating agents
5. Dehydrating agents
6. Halogens and organic halides
7. Phenol

**SULPHURIC ACID:** pure is colorless, heavy, hygroscopic, oily liquid and gives out no fumes when exposed to air. With water it gives out a large amount of heat.

Commercial sulphuric acid contains impurities is brown in color.

Mode of action- it has high affinity of water, draws out water from the tissues and destroys them by rapid dehydration. gives out large amount of heat caused necrosis.

### **Clinical features:**

- General symptoms- burning pain in mouth, throat, esophagus and stomach with brownish or blood stained vomit
- Lips- swollen, abraded and brown black in color
- Teeth- chalky white color, rough and deprived of their polish
- Intense thirst
- Voice- hoarse and rough follows inflammation of the larynx.
- Hyper salivation
- Fatal dose- 5-10ml
- Fatal period- 18-24 hrs

#### Causes of death-

1. Suffocation- death may occur instantaneously edema, spasmodic closure of glottis by the acid.
2. Shock and circulatory failure
3. Peritonitis

**VITRIOLAGE-** sometime envious people use vitriol or strong sulphuric acid to disfigure the face.

Local effect- Slight burning pain, the corrosion tissues and formation of brownish scars which leave permanent scars.

Common complication- conjunctival edema, corneal destruction or blindness. Death may occur by severe burns.

#### Postmortem Appearance:

1. Lips and surrounding skin- brownish or black corroded spots, mucus also will be in dark brown

2. Stomach- if perforated blackening is seen with the escape gastric contents into peritoneal cavity. If not perforated stomach will be concentrated and collapsed, contents dark brown in color with mucus and blood.
3. Liver and kidneys shows fatty changes.
4. Blood vessels- shows clotted blood

Medicolegal aspect: suicidal, homicidal, accidental and vitriolage.

Textbook of Forensic medicine and Toxicology by Dr. K.S. Narayan Reddy  
Suggestions to secure good marks to answer in exam

Explain answer with key point answers

- Questions to check understanding level of students-
  1. What is Vitriolage in forensic medicine?
  2. Explain Postmortem findings of Corrosive poisons?