



# PATIENT WITH MULTIPLE INJURIES

BY

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- **Definition:**

- This is a patient with injuries to more than one system e.g. Neurological and skeletal system.

- **Aetiology:**

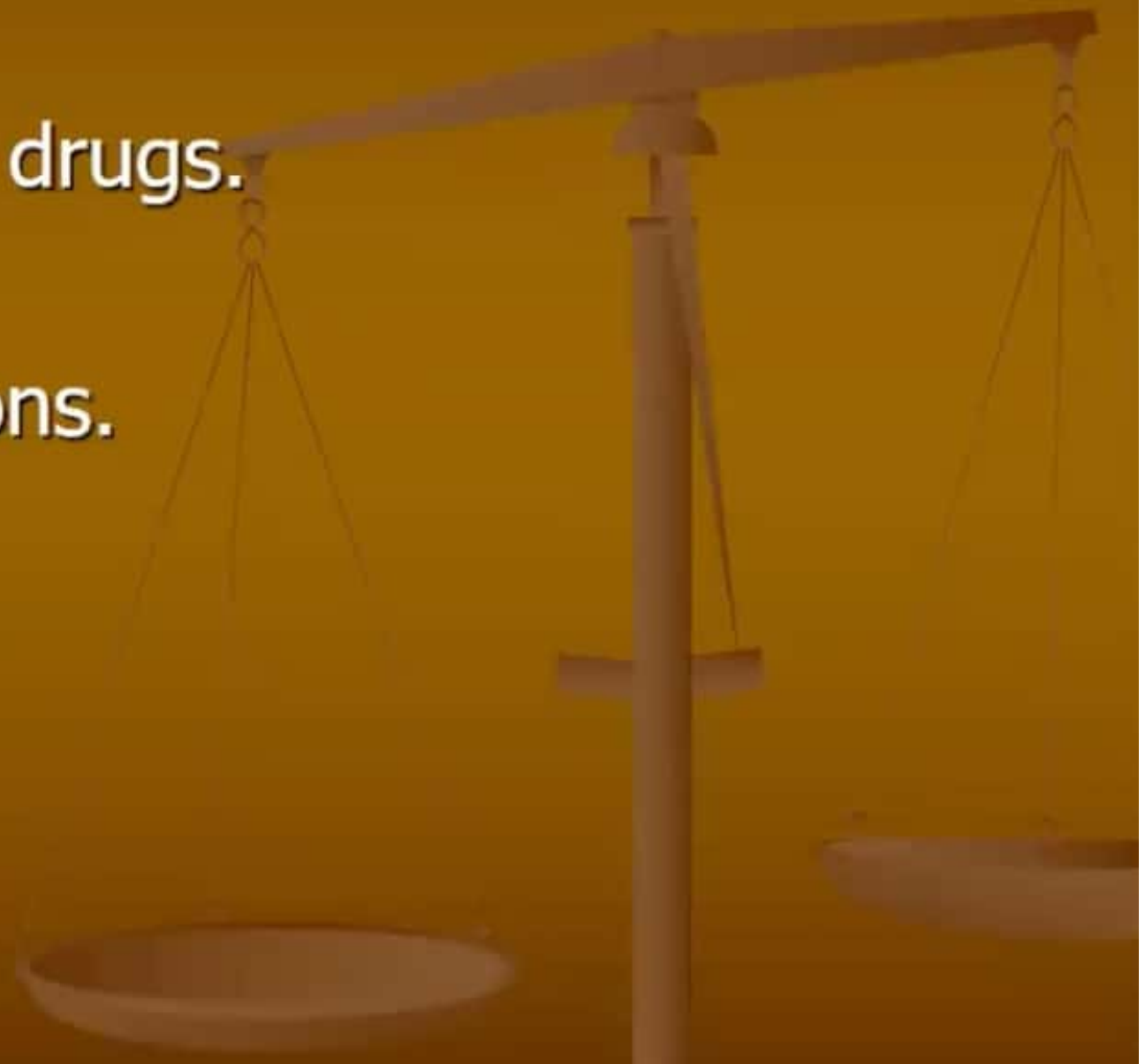
- Road Traffic Accident
- Falls from a height.
- Assault.
- Falling heavy objects e.g. Houses, trees etc.

# Trauma:

- Commonest cause is road traffic accident.
- Most at risk are:
  - i) Pedestrians
  - ii) Cyclists
  - iii) Motorcyclists
- Cost of trauma: Consumes between 1% and 3% of GDP
- Age: 20 - 50 years age group. The most productive age i.e workwise.

# Contributing factors

- Alcohol & other drugs.
- Human error.
- Medical conditions.



# Alcohol:

- Single most important preventable cause of trauma.
- At blood alcohol level of 80 mg %, accident risk increases two fold.
- At 150 mg % it is 10 fold.
- Road traffic Accident alcohol is involved in approximately 70% of cases.
- Personal violence - 60%
- Burn deaths - 50%
- Murders - 50%
- Drowning - 30%
- Fatal workplace accidents - 25%

# Mechanisms of Injury:

- 1) Blunt - Road Traffic Accident or falls.
  - 2) Penetrating - Interpersonal violence, civilian or military.
  - 3) Blast injuries - From explosions.
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# MANAGEMENT OF PATIENT OF MULTIPLE INJURIES

- It is important to get acquainted with injury patterns. This is so because that often the patients are unconscious and cannot give histories.
- **Treatment Priorities.**
- Identify and correct problems which endanger life.
- Resuscitate the patient.
- Determine the extent of other injuries and prioritize their management

# Resuscitation:

- A - Airway.
- B - Breathing
- C - Circulation





# IMMEDIATE CARE OF THE INJURED PATIENT:

## ■ **Airway**

- i) Establish and maintain an unobstructed airway
- ii) Clear blood, mucus and foreign material.
- iii) Insert an oropharyngeal airway or cuffed endotracheal tube.
- iv) If intubation is impossible or ineffective, establish airway by cricothyroidotomy.

## ■ **Breathing:**

- i) Secure the delivery of Oxygen:
- ii) Give the highest possible inspired O<sub>2</sub> concentration.
- iii) Insert a thoracotomy tube with underwater seal drainage if required.
- iv) Remember that signs of hypoxia may be overlooked and that cyanosis is rare.

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## ■ Circulation:

- i) Control bleeding and maintain circulating blood volume.
- ii) Control external bleeding with direct pressure.
- iii) Splint limb fractures.
- iv) Restore circulating blood volume:
  - Crystalloid and colloids initially.
  - Blood transfusion is  $> 20\%$  of blood volume is lost.

# Remember that:

- Volume needed is often underestimated:  
Do frequent monitoring of pulse rate, BP and urine output.
- Coagulopathy, hyperkalaemia, hypocalcaemia, acid base disturbance and hypothermia are potential dangers.

# Priorities of Treatment:

- Head Injury
- Chest injury
- Abdominal injury
- Urinary tract injury
- Injury to extremity
- Others
  - Ophthalmology
  - ENT

