



FIRST AID: BASIC UNDERSTANDING

DR. FUZAIL AHMAD

Assistant Professor

SHRI VARSHNEY COLLEGE, ALIGARH

FIRST AID

First aid could be simply defined as –

“Temporary and immediate treatment given to an injured or ill person with the available resources”.

"उपलब्ध संसाधनों के साथ घायल या बीमार व्यक्ति को अस्थायी और तत्काल उपचार दिया जाता है"।

It has to be done due to lack of time before regular medical help.

यह नियमित चिकित्सा सहायता से पहले समय की कमी के कारण करना पड़ता है।

AIMS OF FIRST AID

Following are the aims of first aid –

- To save life.
- To prevent further injury and worsening of the situation.
- To make the victim as comfortable as possible for conserving his strength.
- To bring professional medical care to the victim as soon as possible.

प्राथमिक चिकित्सा के उद्देश्य निम्नलिखित हैं –

- जान बचाने के लिए।
- आगे की चोट और स्थिति को बिगड़ने से रोकने के लिए।
- पीड़ित को उसकी शक्ति के संरक्षण के लिए यथासंभव सहज बनाना।
- पीड़ित को जल्द से जल्द पेशेवर चिकित्सा देखभाल उपलब्ध कराने के लिए।

PRINCIPLES OF FIRST AID

Principles of the first aid involves the following qualities –

- Knowledge about first aids.
- Keen observation and alertness.
- Confidence and calmness.
- Activeness and presence of mind.
- Never leave the victim alone.
- Call for the ambulance and inform relatives.

APPROACH THE VICTIM WITH DR.ABC

Apply the formula – **DR. ABC**

- **D** stands for identifying the **Danger level** i.e.: is it safe or not?
- **R** stands for **Response** of the victim i.e.: is he conscious or unconscious?
- **A** stands for **Airway** i.e.: make sure is the victim's airway open and clear?
- **B** stands for **Breathing** i.e.: is he/she breathing normally or not?
- **C** stands for **Circulation** i.e.: are there any signs of severe bleeding?

CARDIO-PULMONARY RESUSCITATION (CPR)

- Cardiac means Heart
- Pulmonary is related to Lungs
- Resuscitation is the process of correcting physiological disorder (such as lack of breathing or heartbeat).
- Cardio-Pulmonary Resuscitation (CPR) is the use of chest compression and artificial ventilation to maintain circulatory flow and oxygenation during cardiac arrest.
- कार्डिएक का अर्थ है हृदय
- हृदयपल्मोनरी फेफड़े से संबंधित है
- पुनर्जीवन शारीरिक विकार (जैसे सांस लेने में कमी या दिल की धड़कन) को ठीक करने की प्रक्रिया है।
- कार्डियो-पल्मोनरी रिससिटेशन (सीपीआर) कार्डियक अरेस्ट के दौरान सर्कुलेटरी फ्लो और ऑक्सीजनेशन को बनाए रखने के लिए चेस्ट कम्प्रेसन और आर्टिफिशियल वेंटिलेशन का उपयोग है।

HOW TO PERFORM CPR

Advice for untrained person

Provide hands-only CPR. This means as an untrained person you only need to do uninterrupted chest compressions at the rate of 100-120/min until the paramedics arrive. Don't try to give rescue breathings.



Advice for trained person

Check pulse and breathing. If there is no breathing/pulse within 10 seconds, begin chest compressions. Give two rescue breaths after 30 chest compressions and repeat the same procedure again.



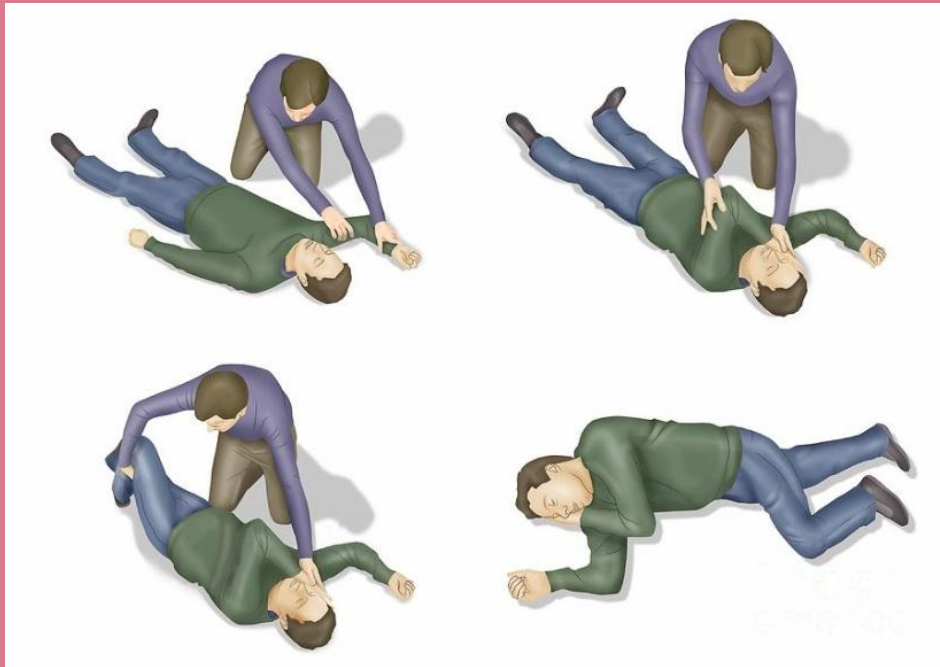
TOP TO TOE ASSESSMENT

Top to toe assessment of following body parts should be done as –

- Head and face – check for the bony structure, nose and ears for fluid, mouth for bleeding etc.
- Neck – check for cervical breaks.
- Collar bone – check for equality and symmetry.
- Arms and legs – check for mishappening, swelling etc.
- Rib Cage – check for paradoxical breathing and fractures.
- Abdomen – check for rigidity.

RECOVERY POSITION

- Secure position which protects the casualty and maintain the airways.
- Head, Neck, and Back should be kept in alignment.



Recovery Position



Kneel beside the casualty, remove any spectacles or wristwatch and check their pockets for bulky items



Place the arm nearest to you at right angles to their body with arm bent in the position it falls. Do not attempt to force the arm into an unnatural position



Bring the arm furthest away from you across the chest and hold the back of the hand against the nearest cheek



With your other hand, grasp the far leg just above the knee and pull it up but keep the foot on the ground

Keep their hand pressed against the cheek and pull on the leg to roll the casualty towards you and onto their side



Roll gently, supporting the head constantly



Adjust the upper leg so that both the hip and knee are bent at right angles. Adjust the hand under the cheek if necessary to keep the head tilted



Casualty in the Recovery Position



HYGIENIC HAND WASHING

Most of the infectants affect our health through our hands. It is because we don't clean our hands properly. Thus hygienic hand washing steps should be followed.

- Wet your hands with clean running water and apply soap/sanitizer evenly.
- Lather both hands by rubbing them together with soap.
- Scrub your hands for at least 20 seconds.
- Rinse your hands well under clean running water.
- Dry your hands with a clean towel or air dry them.



TYPES OF FIRST AID KIT

There are three basic types of first aid kit. These are as follows –

Type I - Designed for indoor use in settings where damage potential is minimal. May be portable/non portable.

Type II - Intended for use in settings where there is some risk of damage due to environmental factors. Should have a water-resistant seal and be able to be mounted.

Type III - Built for use in harsher environments and settings where the potential for damage due to environmental factors is significant. Fully portable.

CONTENT OF FIRST AID KIT

There are typically 30 plus items in a first aid kit but generally every first aid kit must have these 10 items –

- First aid manual
- Tweezers
- Alcohol swabs
- Antibiotic ointment
- Sticky bandages
- Roll bandages
- Medical tape
- Elastic bandages
- Cotton
- Scissor



FIRST AID DRESSING AND BANDAGE TECHNIQUES

Dressing technique

- Put on gloves to prevent contact with the victim's blood.
- Clean the wound with mild soap and water.
- Apply a small layer of topical antibiotic if desired.
- Place a clean dressing over the entire wound.
- Gauze dressings let in air for faster healing.
- If blood soaks through the dressing, place another dressing over the first one.

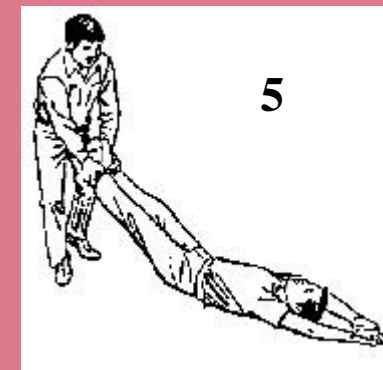
Bandage technique

- Wrap cloth strips over the dressing and around the wound several times.
- Extend the bandage at least an inch beyond both sides of the dressing.
- Don't wrap the bandage so tight that it interferes with blood flow to healthy tissue.
- Tie or tape the bandage in place.

FAST EVACUATION TECHNIQUE (SINGLE RESCUER)

There are various single rescuer evacuation techniques which can be used to evacuate someone who is in danger. Different techniques could be applied in different-different situations. Some single rescuer techniques are as follows –

1. Crawling technique
2. Arm carry technique
3. Pack-strap carry technique
4. Fire fighters carry technique
5. Ankle or shoulder pull technique



FIRST AID RELATED WITH RESPIRATORY SYSTEM

- In resting condition breathing difficulty is almost always a medical emergency. Breathing difficulties can range from being short of breath, being unable to take a deep breath or Feeling like you are not getting enough air.

आराम की स्थिति में सांस लेने में कठिनाई लगभग हमेशा एक चिकित्सा आपात स्थिति होती है। सांस लेने में तकलीफ, गहरी सांस लेने में असमर्थता या ऐसा महसूस होना कि आपको पर्याप्त हवा नहीं मिल रही है, हो सकती है।

- These difficulties could arise due to various reasons such as swelling within the throat, suffocation by smoke or gases asthma, drowning, choking and Strangulation.

ये कठिनाइयाँ विभिन्न कारणों से उत्पन्न हो सकती हैं जैसे गले में सूजन, धुँएँ या गैसों से दम घुटने, दमा, डूबना, घुटना और गला घोंटना।

FIRST AID RELATED WITH RESPIRATORY SYSTEM

First aid for such breathing difficulties can be given as follows-

- Call local emergency number right away.
- Check the person's airway, breathing, and pulse. If necessary, begin CPR.
- Loosen any tight clothing.
- Help the person use any prescribed medicine (such as an asthma inhaler etc.)
- Continue to monitor the person's breathing and pulse until medical help arrives.

ऐसी साँस लेने में कठिनाई के लिए प्राथमिक उपचार निम्नानुसार दिया जा सकता है-

- तुरंत स्थानीय आपातकालीन नंबर पर कॉल करें।
- व्यक्ति के वायुमार्ग, श्वास और नाड़ी की जाँच करें।
- यदि आवश्यक हो, सीपीआर शुरू करें।
- किसी भी तंग कपड़े को ढीला करें।
- किसी भी निर्धारित दवा (जैसे अस्थमा इन्हेलर आदि) का उपयोग करने में व्यक्ति की सहायता करें।
- चिकित्सा सहायता आने तक व्यक्ति की श्वास और नाड़ी की निगरानी करना जारी रखें।

Asthma



“Asthma is an allergic reaction resulting in the narrowing of the smaller airways”

Swelling of the airway lining

Secretion of mucus in the airways

Asthma

Causes

Cold changes in the weather

Allergies

Upper respiratory tract infection

Exercise

Nervous tension

Asthma

Recognition

Mild cases

Cough
Rapid breathing
Rapid pulse
wheeze

More severe

Pale
Distressed
Anxious
Fighting for breath

Very severe

Exhaustion
blueness
Unable to speak
No wheeze at all

Asthma

Management

- Activating the emergency service
- Reassurance of the victim
- Assist them to a positing of comfort
- Supplemental oxygen should be provided
- If the victim became unconscious, the airway must be maintained.



Thank you