

NS-11
FIRST AID

A. DEFINITION

First Aid – is an immediate and temporary care given to a victim of an accident or sudden illness before the services of a physician is obtained.

B. PURPOSE OF FIRST AID

1. To save life
2. To prevent further injury
3. To preserve vitality and resistance to infection

C. PHASES OF FIRST AID

1. Self-aid
2. Assistance from a companion
3. Emergency treatment
4. Initial surgery

D. FIRST AID RULES

1. Do not get excited. First, check for danger and then check for responsiveness. Determine whether the victim is conscious. If the victim is conscious, ask him what happened and what is wrong now. If the victim is unconscious, proceed to check the airway, breathing and circulation. Commence resuscitation as appropriate.
2. Do not move injured victim unless it is necessary. If necessary to move a casualty, seek assistance if possible and handle gently.
3. Keep the victim lying down with his head level with his feet while being examined.
4. Keep the victim warm and comfortable. Remove enough clothing to get a clear. To get a clear idea to get a clear idea to the extent of the injury.
5. Examined the victim gently. Threat the most urgent injuries first and then treat the most urgent injuries first and then treat the other injuries to the best of your ability.
6. Avoid allowing the victim to see his own injury. Assure him that his condition is understood and that he will receive good care.
7. Do not try to give any solid or liquid substance by mouth to an unconscious victim nor to a victim who has sustained an injury.
8. Do not touch open wounds or burns with fingers or other objects except when sterile compresses or bandages are not available and it is absolutely necessary to stop bleeding.
9. Do not try to arouse an unconscious person.
10. Seek medical attention immediately.

“HURRY CASES” in First Aid

a) **Stoppage of Breathing** – Critical time is four minutes to restore the victim to normal before brain damage take place.

- Management of the Casualty:

1. Clean the airway
2. Inflate the lungs with five quick breaths (proceed to CPR)

b) **Severe Bleeding** – Bleeding and hemorrhage mean the same thing, namely, that blood is escaping from arteries, capillary vessels, or veins.

- **Types of Hemorrhage:**

1. **Arterial Bleeding** – Blood from an open artery. The color of the blood is bright red. The blood spurts which are synchronized with the pulse.
2. **Venous Bleeding – Blood from an open vein. The color of the blood is dark red. The blood escapes in a slow steady flow.**
3. **Capillary Hemorrhage** – Blood from damage capillaries. The color of the blood is intermediate between bright and dark red. The blood only oozes from the wound. This is the common type of hemorrhage.

- **Controlling external bleeding :**

1. **Direct pressure**

(a) Digital pressure (pressure points)

- | | |
|-------------|--------------|
| - Facial | - Temporal |
| - Carotid | - Subclavian |
| - Auxiliary | - Brachial |
| - Femoral | |

(b) Compress and Bandage

(c) Ligation – tying

(d) Torsion – twisting

2. **Elevate the injured part to lessen the flow of blood.**

3. **Indirect pressure – Tourniquet**

c. **Poisoning**

- 1) **Swallowed** – Antidote is to dilute with water or milk to lessen the concentration of the poison. Milk coats the lining of the intestines.
- 2) **Inhaled** – Proper ventilation at once (open air).
- 3) **Contacted poison** – Wash at once with soap and water. Bath soap is recommended.
- 4) **Injected as in snake bite.**

Snake Bite

= **Expose the wound**

- (a) Remove clothing
- (b) Remove shoes
- (c) Remove casualty's jewelry (safeguard/protect jewelry. Place in casualty's pocket)

= **Determine the nature of bite**

(a) **Non-poisonous**

- | | |
|-----------------------------|---------------------------|
| - Four to six rows of teeth | - No fang marks on victim |
|-----------------------------|---------------------------|

(b) **Poisonous**

- | | |
|---------------------|--|
| - Two rows of teeth | - Two fangs which create puncture wounds |
|---------------------|--|

= Signs and Symptoms

(a) Less than one hour

- Headache
- Vomiting
- Transcript faintness, confusion, unconscious

(b) One to three hours after.

- Drooping eyelids
- Double vision (Diplopia)
- Difficulty in swallowing
- Enlarged lymph glands
- Abdominal pain
- Dark urine
- Rapid pulse
- Hemorrhage

(c) After three hours

- Paralysis in large muscles
- Respiratory paralysis
- Circulatory failure

= Treatment

(a) Non-poisonous

- Cleanse/disinfect wound
- Use soap and water or an antiseptic solution.
- Use iodine (if casualty is not allergic to it)

CAUTION: If the bite cannot be positively identified as poisonous or non-poisonous, treat as a poisonous bite.

(b) Poisonous

- Rest the casualty / have casualty lie down
- Keep casualty still to delay venom absorption
- Apply broad bandage
- Keep bitten part below heart level
- Immobilize the limb
- Bring transport to casualty

= DON'TS

- (a) Cut or incise wound
- (b) Apply tourniquet
- (c) Wash bitten area

= PREVENTION: Avoidance – know where the snake rests

- (a) Near logs
- (b) In heavy brush (vegetation)
- (c) In Rocky Edges (reef)

d. Shock

Shock – is a condition in which there is insufficient blood in the circulation to fill the blood vessels. As a result, the tissue do not receive enough oxygen to maintain life and there is extreme body weakness or physical collapse.

Main Causes of Shock

1. **Hemorrhage**, also loss of water due to nausea and vomiting and loose bowel movement
2. **Severe injuries**, such as burns and fractures
3. **Asphyxiation** – lack of oxygen

Other factors that may cause or aggravate shock

- 1) Severe pain
- 2) Wound infection
- 3) Disease

- 4) Exposure
- 5) Fatigue
- 6) Hunger and thirst
- 7) Fear and worry
- 8) Unnecessary or rough handling

Signs and Symptoms of Shock

- 1) The casualty is pale
- 2) Skin is cold and clammy
- 3) Pulse is rapid and weak
- 4) Respiration is rapid, irregular and shallow
- 5) If the casualty is conscious, he may be listless and drowsy and complain of thirst and dryness in the mouth.
- 6) The eyes may have a vacant, dull expression, and the pupils may be enlarged

Treatment for Shock

- 1) Control the bleeding
- 2) Give oral fluids providing there is no contradictions such as abdominal wounds or unconsciousness
- 3) Keep the casualty comfortable and warm but do not overheat
- 4) Lay the patient on his back with his feet higher than his head except in cases of chest or head injuries

e. Fracture

Fracture – is a break in the continuity of the bone

Kinds of Fracture

- 1) **Open (compound) fracture** – Bone has broken through skin.
- 2) **Closed (simple) fracture** – Skin has not been penetrated on both ends.

Signs and Symptoms

- 1) **Deformity** – present when injured limb lies in unnatural position or is angulated where there is no joint
- 2) **Pain at the point of fracture**
- 3) **Crepitation (grating sound)**
 - Felt and heard when bones rub together
 - Never move the injured extremity to determine crepitation
- 4) **Discoloration (echymosis, bruising)**
- 5) **Loss of motion**
- 6) **Exposed bones**
- 7) **Swelling (endema)**
- 8) **Possible loss of pulse below fracture**

f. Splinting

Splinting – a device to immobilize an injured part of the body.

Reasons for Splinting

- 1) Relieve pain by minimized movement
- 2) Prevent further damage to injury site

General Principles of Splinting

- 1) **Splint fracture where it lies** – DO NOT reposition. If fracture is severely angulated, straighten it with a gentle pull so that limb can be incorporated into a splint.
- 2) **Immobilize fracture site before moving casualty. Splint should immobilize joint above and below fracture site.**
- 3) **Pad splints before applying.**
- 4) **Dress all wounds and/or open fracture (exposed bones) prior to splinting.**
- 5) **Check for neurovascular function before, during and after application of splint.**

g. Burns and Scalds

Burn - is an injury that results from heat, chemical agent or radiation. It may vary in depth, size and severity.

Scalds - is a burn caused by a liquid.

Classification of Burns

- 1) **Depth**
 - (a) **First Degree** – The outer skin is reddened and welts or slightly swollen.
 - (b) **Second Degree** - The under skin is affected and blisters are formed.
 - (c) **Third Degree** - The skin is destroyed and tissues underneath are damaged.
- 2) **Causative Agent**
 - (a) **Thermal agent (heat)**
 - (b) **Electricity**
 - (c) **Radiation burns**
 - (d) **Chemical agent (acids,alkali)**

Treatment for first Degree Burn

- 1) Immerse burnt area in cold water until the patient ceases to feel pain.
- 2) When it is possible to immerse the burned area, moist cold towels should be applied and renewed frequently.
- 3) Follow this application for dry dressing.
- 4) If desired a simple burn ointment may be applied

Treatment for second degree burn

- 1) Follow the steps prescribe in the first degree except do not apply any burn ointment.
- 2) Gently Blot area dry with sterile gauze or clean cloth.
- 3) Apply sterile gauze or clean as protective dressing.
- 4) Never break a blister.

Treatment for third Degree Burn

- 1) Do not remove adhered particles of charred clothing.
- 2) Cover burned area with sterile dressing or freshly laundered sheet.
- 3) Do not allow victim to walk.
- 4) If medical help is not available for one hour or more and victim is conscious, and not vomiting, give a weak solution of salt and soda.

h. Fainting

Fainting is loss of consciousness caused by a temporary reduction of the blood supply to the brain.

Causes

- 1) Emotional
- 2) Fatigue
- 3) Hunger

Signs and symptoms

- 1) Weakness
- 2) Palor
- 3) Unconsciousness
- 4) Dizziness
- 5) Cold Sweat

Treatment

- 1) **Seat victim with knees far apart and hold head far down
Between knees for about five minutes**
- 2) **If victim loses consciousness , lay him down on his back with head
turned to one side.**
- 3) **After consciousness return keep victim quiet for about 15 minutes.**

i. unconsciousness

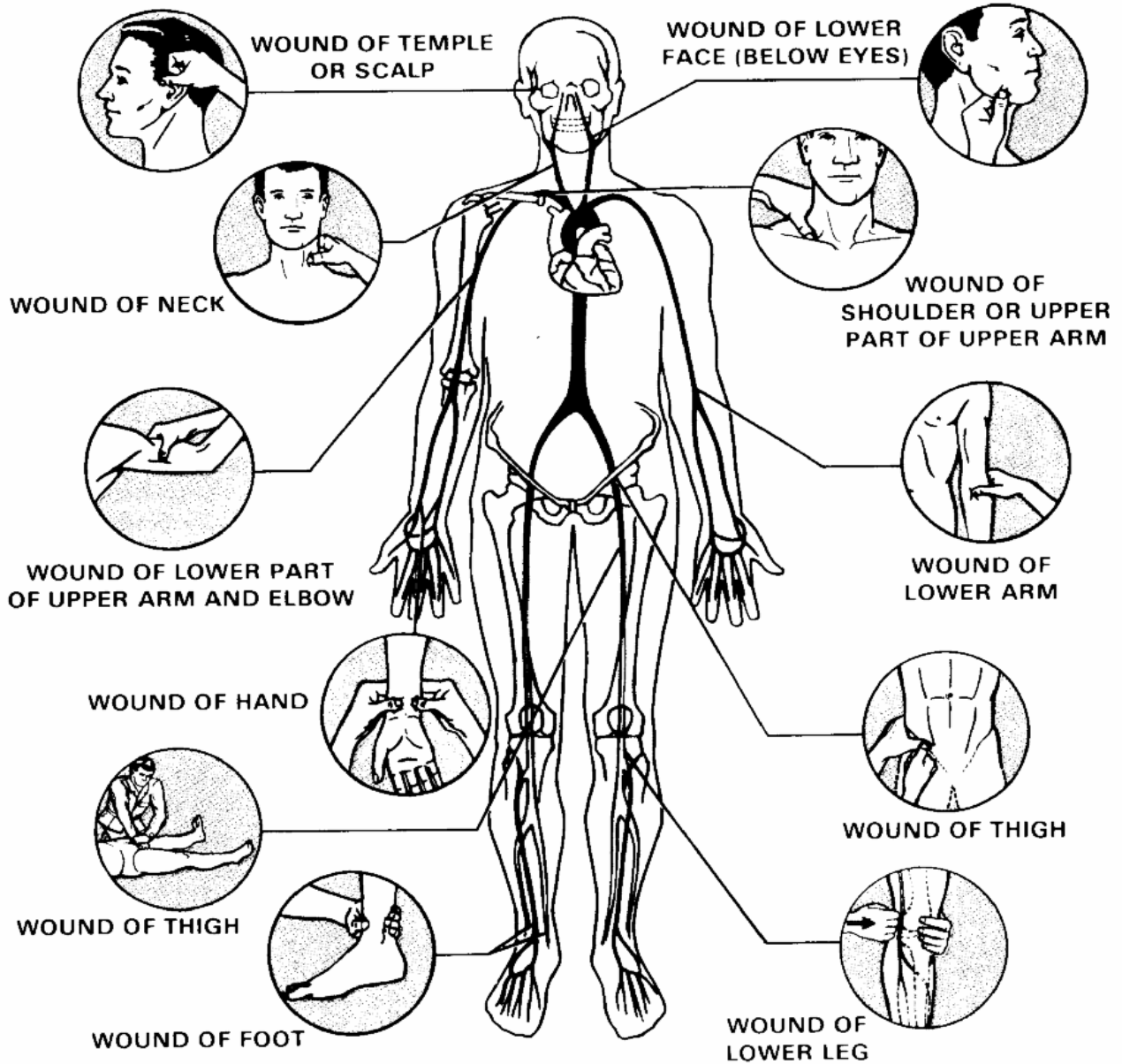
Unconsciousness - a person who does not respond to any spoken words or obeys a shouted command.

Observation to the unconscious

- 1) **Check for the ABC**
- 2) **Check for hemorrhage**
- 3) **Check for fracture**
- 4) **Check and record vital signs**
- 5) **Check the size and reaction of the pupils to light**
 - (a) Dilated pupils – (possible cause) Shock,
Cardiac arrest ,brain damage ,substance abuse
(Amphetamines,Marijuana), disorder of central nervous system.
 - (b) Constricted Pupils – Head injury, stroke,
Substance abuse (narcotics)
- 6) **Eyelid Response**
- 7) **Response to speech**
- 8) **Response to pain**

- E N D -

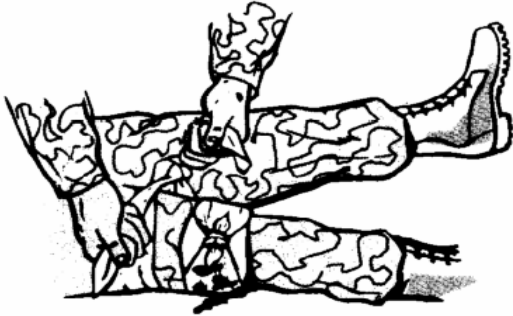
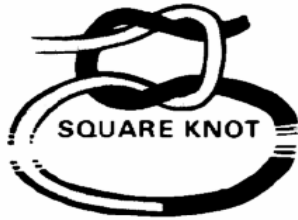
USE PRESSURE POINTS



APPLY TOURNIQUET

(A)

MAKE A LOOP
AROUND THE LIMB;
TIE WITH SQUARE
KNOT.



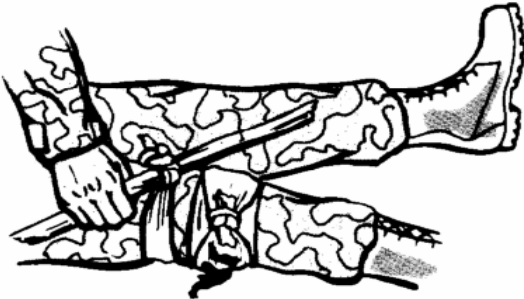
(B)

PASS A STICK,
SCABBARD, OR
BAYONET UNDER
THE LOOP.



(C)

TIGHTEN TOURNIQUET
JUST ENOUGH TO
STOP ARTERIAL
BLEEDING.



(D)

BIND FREE END
OF STICK TO
LIMB TO KEEP
TOURNIQUET
FROM UNWINDING.



FILL LUNGS AND COMPRESS CHEST

(A) VENTILATION



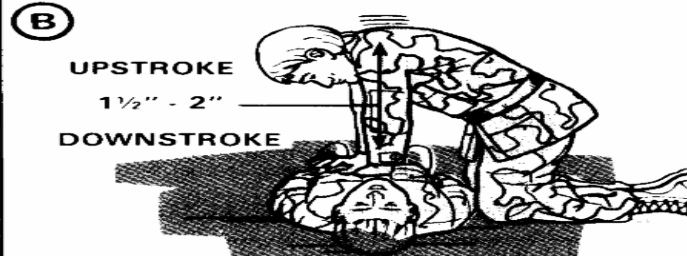
2 QUICK LUNG INFLATIONS

(B) COMPRESSION



15:2 RATIO
15 CHEST COMPRESSIONS
RATE OF 80/MIN.
2 QUICK LUNG INFLATIONS

USE CORRECT POSITIONS



USE TWO SOLDIERS IF PRESENT

(B)
BREATHING

1 LUNG INFLATION
— AFTER EACH 5
COMPRESSIONS
— INTERPOSED BETWEEN
COMPRESSIONS
5:1 RATIO



5 CHEST COMPRESSIONS
— RATE OF 60/MINUTE
— NO PAUSE FOR
VENTILATION

(C)
CIRCULATION

**NOTE: THE TWO RESCUERS
SHOULD BE ON OPPOSITE
SIDES OF SOLDIER DURING
THESE PROCEDURES.**

(A)
AIRWAY