FIRST AID

FIRST AID

- **FIRST AID: First aid refers to the assistance provided to people who suddenly fall ill or are involved in an accident, using available materials to prevent their condition from worsening until medical help arrives.**

- **THE IMPORTANCE OF FIRST AID: Throughout their lives, people may encounter situations that require first aid at any time. Simple and effective first aid administered promptly can save the life of a sick or injured person. In cases of trauma or sudden illnesses, the ability to transport the patient or injured person safely to a doctor or hospital depends on the immediate administration of proper first aid.**

BASIC RULES OF FIRST AID

- **Diagnosis:** To make a diagnosis, the patient's or injured person's medical history is first obtained. Then, symptoms and findings are identified.

- **Treatment:** Keeping the basic first aid rules in mind, the most appropriate first aid for the injured or ill person is administered in a timely manner and without causing harm.

- **Transportation:** After diagnosis and treatment, the patient or injured person is transported under appropriate conditions to a healthcare facility where necessary care and examination can be provided.

BASIC RULES OF FIRST AID

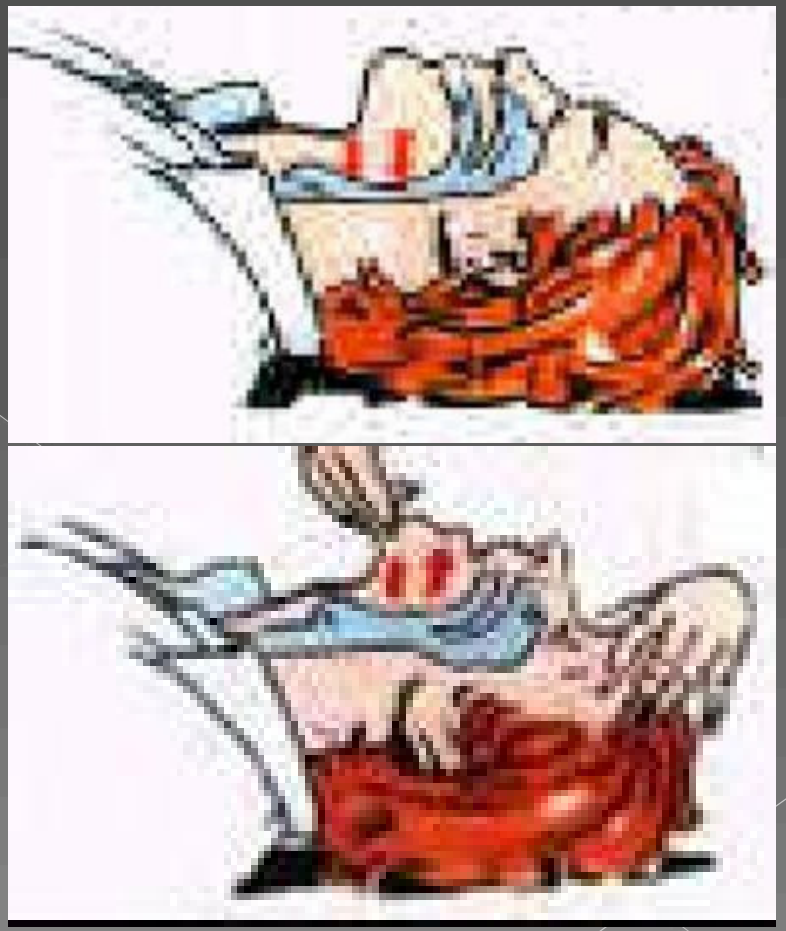
- Ensure the safety of the patient or accident victim.
- Lay them down and let them rest.
- Mark the accident site.
- Prevent panic and disperse the crowd.
- Provide fresh air; keep the patient warm and loosen any tight clothing.
- Thoroughly examine the patient or accident victim. Respond quickly, calm, and to the extent necessary
- Stop the bleeding.
- Ensure regular breathing.
- Prevent shock. Do not give the person anything to eat or drink.
- If necessary, seek medical help.
- If you are unsure of the situation, do not insist.

BASIC LIFE SUPPORT (CPR)

A: Airway

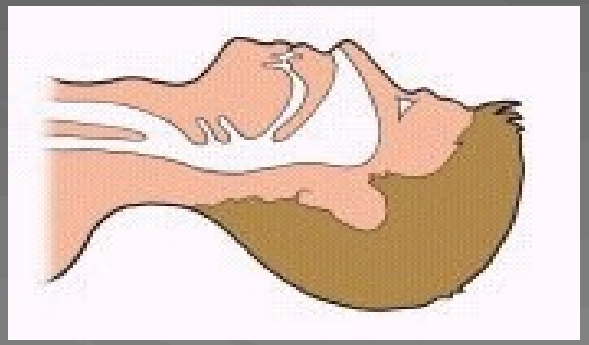
For successful basic life support, opening the airway by positioning the head is the first important step. In an unconscious patient, the tongue falling backward is the primary cause of airway obstruction.

Since the tongue is directly attached to the lower jaw and the epiglottis is indirectly attached to it, tilting the head back and pulling the lower jaw forward and upward lifts the tongue away from the back of the throat and usually opens the airway.



CLOSED

BLOCKED



OPEN

BLEEDING

- ***Bleeding*** **is defined as the escape of blood circulating within a bloodvessel into the surrounding tissue for any reason.**

- **In a healthy adult, 5–7 liters**
- **(Formula: Body weight × 1/13)**

- **A sudden loss of this amount (by one-third) poses a life-threatening risk.**

- **THE FIRST AIDER'S JOB IN CASES OF BLEEDING IS TO PREVENT BLOOD LOSS.**

BLEEDING

- **CAUSES**

- Tissue injuries (cuts, bruises, contusions)
- Fractures, dislocations, sprains
- Falls, impacts (work accidents, etc.)
- Extreme pressure changes
- Diseases (tuberculosis, ulcers, hypertension, tumors, etc.)

INTERNAL BLEEDING

- ***Internal bleeding*** **occurs when blood flows into the body's cavities asaresult of the rupture of blood vessels supplying internal organs or the fragmentation of organs.**

- **It is usually not detectable from the outside of the body, but sometimes presents with symptoms such as coughing, vomiting, or blood in the stool.**

- **SYMPTOMS:**

  - **Fainting**
  - **Pallor**
  - **Cold, clammy sweat**
  - **Rapid but weak pulse**
  - **Rapid breathing and shortness of breath**
  - **Ringing or buzzing in the ears**

  Restlessness, extreme thirst

INTERNAL BLEEDING

First aid

- If internal bleeding is suspected, call emergency medical services immediately. Keep the patient lying still, monitor their breathing, pulse, and level of consciousness, and record any changes at short intervals.

- Lay the patient down and keep them still. If they are unconscious but breathing normally, place them in the recovery position to keep the airway open and prevent choking.

EXTERNAL BLEEDING

- ***External bleeding*** **is when blood flows out through the skin —the body's outer covering—from a severed or torn blood vessel.**

- **Types**

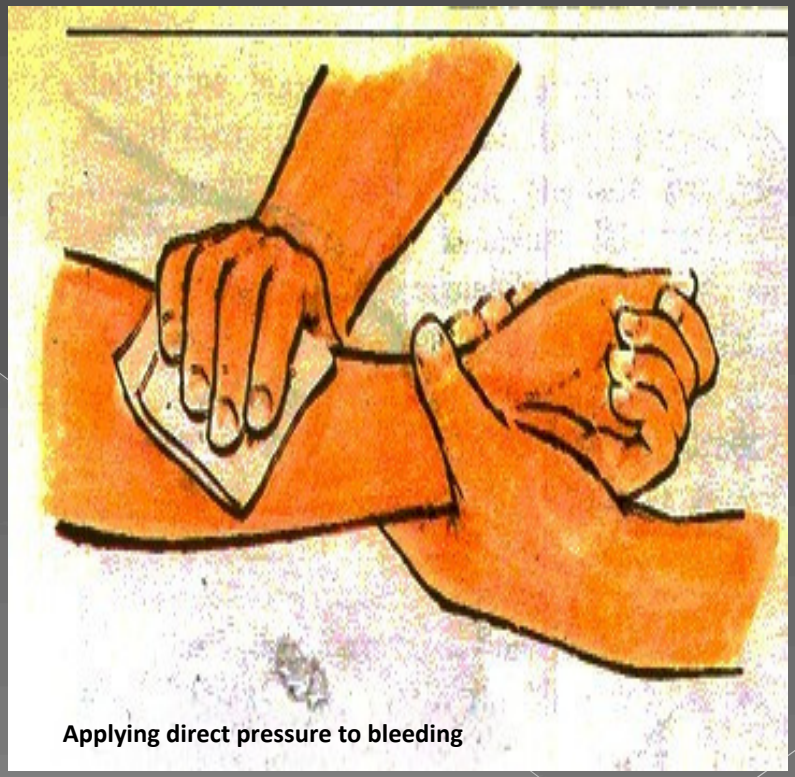
  - **Arterial bleeding spurts out.**
  - **Venous bleeding flows steadily and more slowly.**
  - **Capillary bleeding oozes or seeps slowly.**

EXTERNAL BLEEDING

- ***First aid***

- Stop the bleeding as soon as possible. The bleeding may stop on its own on its own, but first aid should still be administered.
- Apply a pressure dressing (gauze) to the bleeding area and apply pressure; wrap it securely, and do not remove any clots.
- If an arm or leg is bleeding, keep the bleeding area as above heart level.
- If there is a foreign object inside the bleeding wound (knife, piece of wood , etc.), do not remove it; if broken bone ends are visible, do not push them back in.
- If the bleeding doesn't stop, apply pressure with your fist or fingers to apply pressure.
- If the bleeding still does not stop, proceed to apply a tourniquet. Take precautions against shock.

The most important thing to do for external bleeding is to apply direct pressure to the bleed.



Applying direct pressure to bleeding

TOURNIQUET APPLICATION

- **CAUTION!!!**

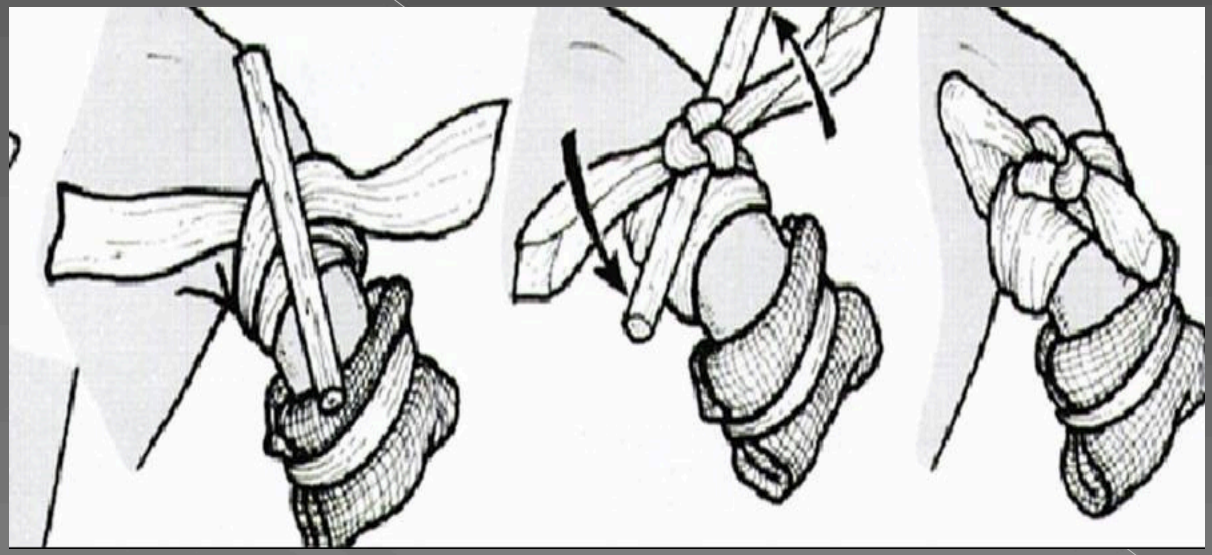
- Apply only to a single-bone area.
- The tourniquet band must be at least 8 cm wide and made of non-stretchy material.
- Never use wire, rubber, string, etc.
- Apply only in cases of organ amputation or bleeding that cannot be stopped by other methods.
- Duration of Application
- It should be applied for no more than 2 hours.
- During application, loosen the tourniquet for 5–10 seconds every 20 minutes for the first hour, and every 10 minutes for the second hour to allow blood flow to the tissues below the tourniquet.

TOURNIQUET APPLICATION

- **Application Technique**

- Wrap the tourniquet strap twice and tie a knot so that the knot remains on top.
- Place the tourniquet rod (wooden spoon, pencil, etc.) over the knot. Place it and tie two more knots.
- Rotate the rod in one direction until the bleeding stops.
- Once the bleeding has stopped, secure the rod.
- Don’t forget to note the time of application.

TOURNIQUET APPLICATION



TOURNIQUET APPLICATION

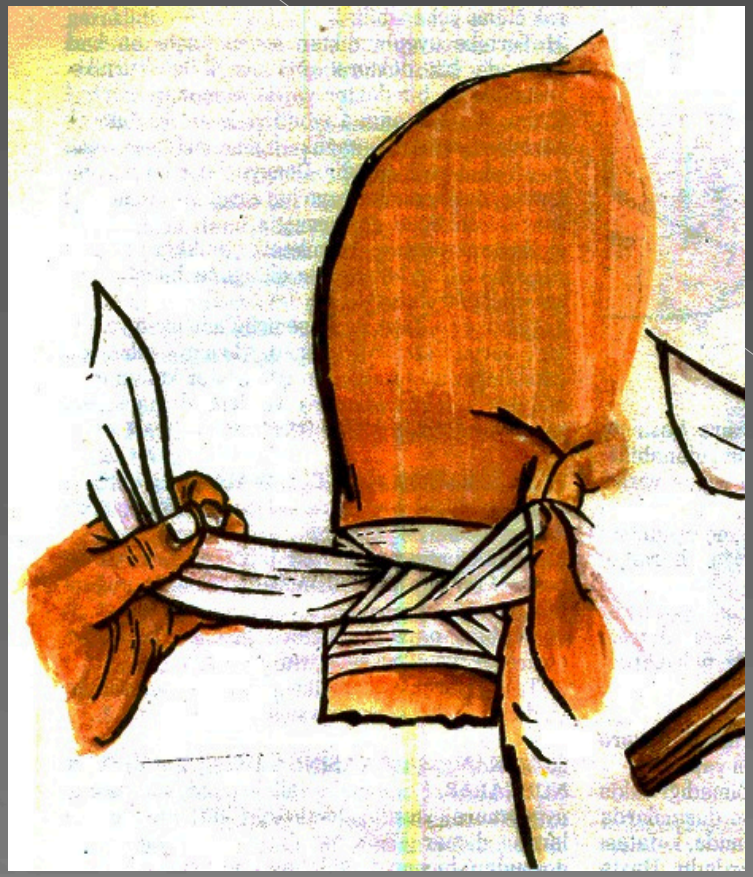


Figure 1

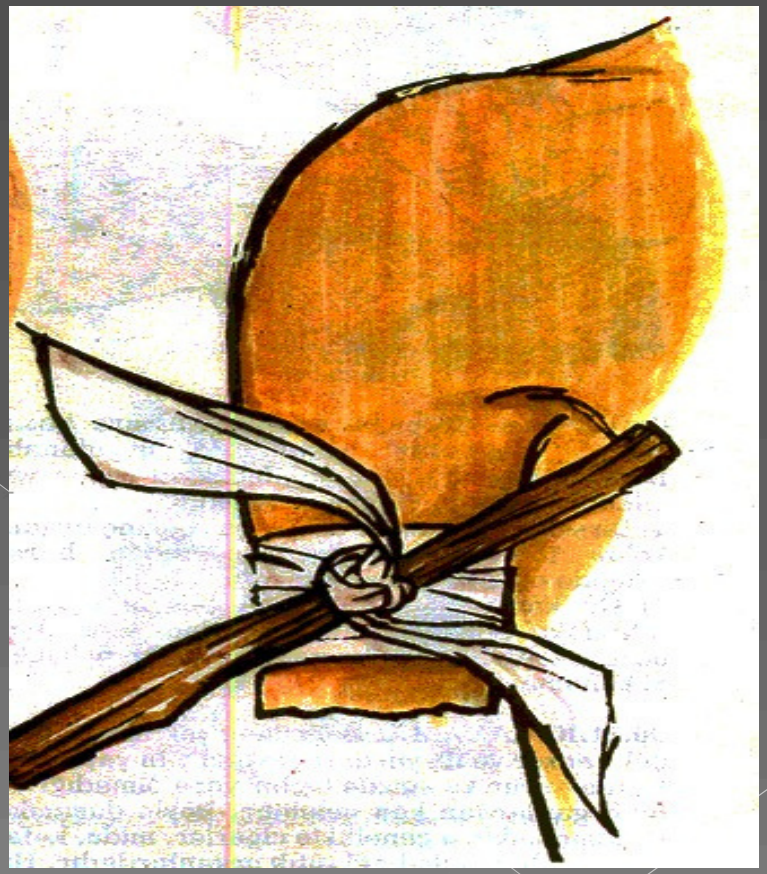


Figure 2

TOURNIQUET APPLICATION

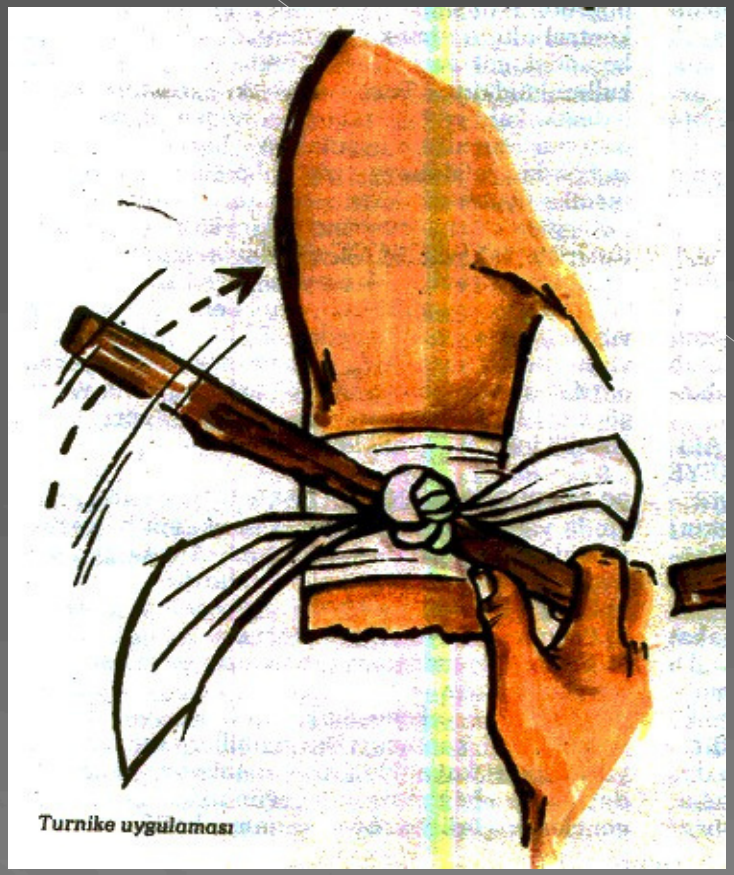


Figure 3

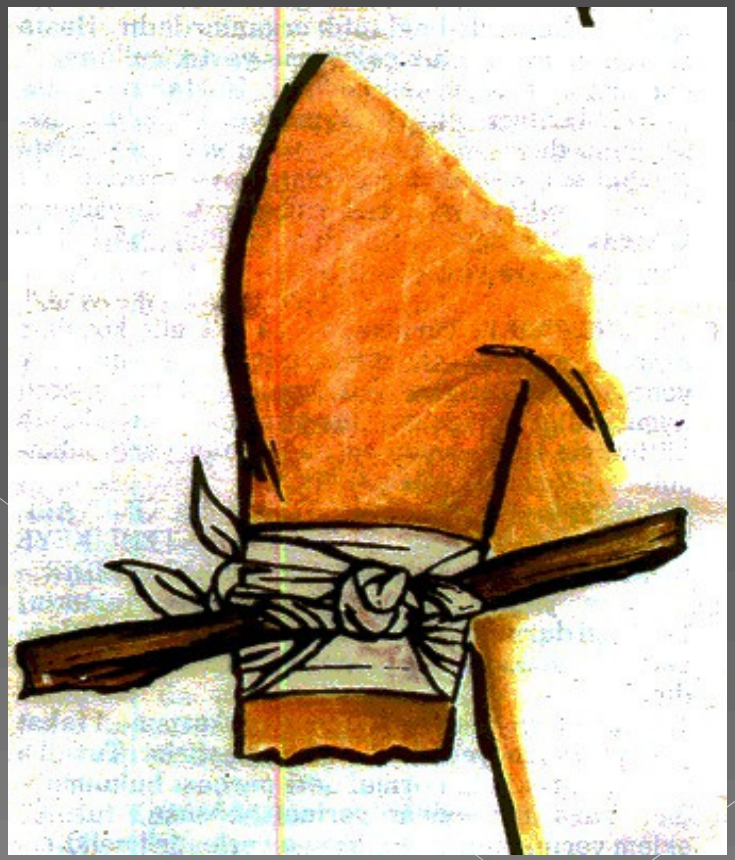


Figure 4

SHOCK

- This condition arises when the amount of blood in circulation decreases or blood pressure drops, resulting in an insufficient supply of oxygen to the cells.
- In the heart—the organ that pumps blood throughout the body—a problem may cause the pumping function to be insufficient or to stop entirely. As a result, blood pressure drops (e.g., electric shock, insufficiency in the arteries supplying the heart, excessive blood loss, extremely low blood sugar, etc.).
- There may be a decrease in the volume of blood circulating in the body (e.g., excessive blood loss from internal or external bleeding).
- Conditions in which the liquid component of blood, known as plasma, is lost (e.g., burns).
- Blood may be withdrawn from circulation due to causes such as prolonged standing, fear, pain, or distress.

SHOCK

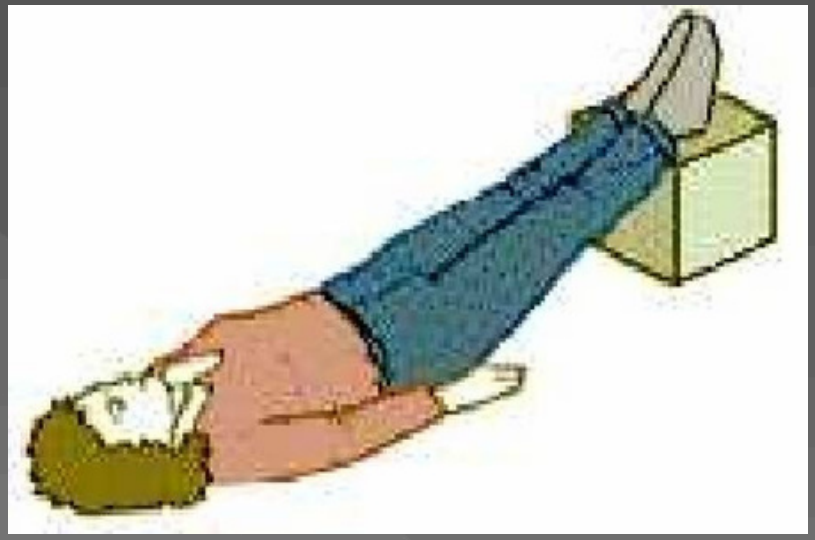
⦿ Symptoms

- The skin appears pale.
- The pulse is weak but rapid.
- The skin is cold and clammy.
- Breathing is shallow and rapid.
- A person in shock may experience shortness of breath and feel thirsty.
- Nausea and vomiting may occur.
- Loss of consciousness may occur.

SHOCK

- **First aid**

- Place the patient in the shock position to increase blood flow to vital organs such as the brain, heart, and lungs. (Have the patient lie on their back with their legs raised about 30 cm.)
- Cover the patient with a blanket or sheet.



SHOCK

- **What to do**

- Place the patient in the shock position and turn their head to the side
- Check for bleeding and fractures; take precautions if necessary
- Remove any clothing that is constricting the body
- If there are people around, move them away to ensure the patient can breathe comfortably
- Protect them from extreme heat and cold
- Stay by the patient's side and try to calm them by talking to them
- Call an ambulance as soon as possible or arrange for the patient to be transported to a hospital.

FAINTING

Fainting is the temporary loss of consciousness caused by a lack of oxygen in brain cells due to reduced blood flow to the brain. During this time, breathing and circulation may stop. The person falls to the ground.
Recovery is usually rapid and complete.

Causes

- An emotional reaction
- Reaction to pain
- Standing motionless for a long time
- Very hot environments

Inadequate nutrition, hunger

Symptoms

- The pulse weakens and slows down
- The face pales

FAINTING

- **Things to Avoid**

- Do not move the person around
- Do not give the victim anything to eat or drink
- Do not try to warm the victim with a hot water bottle or a bottle of hot water
- Do not let the victim smoke

FAINTING

First Aid

- In some cases, take precautions before fainting occurs (e.g., have the person who has lost their balance sit down, bend their head forward between their knees and take deep breaths).
- Lay the person who has fainted on their back on the ground.
- Place a support under their legs and lift them.
- Remove any clothing around their neck to help them breathe comfortably
- As they begin to come to, slowly help them sit up
- Do not give them anything to eat or drink until they have recovered.
- If the person does not regain consciousness quickly, clear their airway and call an ambulance immediately.

GRAND MAL SEIZURE

Caused by a disruption in the brain's electrical activity.

EPILEPTIC SEIZURE

SYMPTOMS

During the seizure

- The patient suddenly loses consciousness and falls to the ground.
- They may go completely stiff for a short time, and their breathing may slow down.

  The mouth and lips turn blue.

  As the body begins to relax, convulsions and tremors occur.

  The jaw locks, breathing becomes difficult, and foam accumulates in the mouth.
- If the patient has bitten their tongue or lip, blood may come from the mouth.
- They may lose control of their bladder and, sometimes, their bowels.

After the seizure

- Breathing returns to normal.
- Stumbling and unusual behavior may occur.
- The patient will want to rest.

EPILEPTIC SEIZURE

What to Do

- Lay the patient down in a comfortable, suitable place.
- Tuck a handkerchief into the side of their mouth to prevent them from biting their tongue.
- Support their head with something soft to prevent them from hitting it.
- Ask everyone except those who can help to step away.
- Loosen their clothing to make them more comfortable.
- Do not leave the patient alone until the seizure has passed and the patient has fully regained consciousness.

Things to Avoid

- Unless there is a danger, do not lift or move the patient.
- Do not give the patient any food or drink.
- Do not try to stop the muscle spasms, pry open the patient's jaw, or wake them up during a seizure!

Remember that every seizure will eventually stop!!!

FRACTURES

- A fracture is a break in the integrity of a bone resulting from direct or indirect blows or sprains.
- In an open fracture, the skin near the fracture site is injured. In a closed fracture, there is no injury to the skin.

FRACTURES

- **Causes**
  - Traffic accidents
  - Sports injuries
  - Falls
  - Firearm injuries
  - Blunt force trauma, striking a hard surface, etc.
- **Symptoms**
  - Pain, tenderness
  - Deformity
  - Limited mobility
  - Swelling, bruising
  - Cracking sound

FRACTURES

- **First aid**

- Administer first aid at the scene of the accident. Unless the situation is dangerous, do not move the patient.
- If there is bleeding or shock, take the necessary precautions
- In cases of open fractures, do not attempt to realign the bones. Support the bones in their current position with bandages.
- Apply a splint to the broken area to prevent movement.
- Elevate the area above heart level.

FRACTURES

1-) FIRST AID FOR SCAPULA AND CLAVICLE FRACTURES

2-) FIRST AID FOR SPINAL FRACTURES

3-) FIRST AID FOR FOREARM FRACTURES

4-) FIRST AID FOR LEG FRACTURES

5-) FIRST AID FOR FOOT AND ANKLE FRACTURES

6-) FIRST AID FOR FINGER FRACTURES

FIRST AID FOR CLAVICLE AND SCAPULA FRACTURES

- Place a small cotton ball or a stiff cloth under the armpit on the side of the fracture, and suspend the arm from the neck using a scarf or a piece of gauze.
- Apply ice to the fracture site.
- Keep the injured person seated and transport them to the hospital by ambulance.
- If you do not have a triangular bandage or scarf, slip the injured hand between the two buttons of your jacket, lift the jacket hem on the same side, and pin it in place.

FIRST AID FOR SPINAL FRACTURES

- Spinal fractures—and sometimes varying degrees of injury to the spinal cord—often result from falls from heights or traffic accidents.
- Do not turn the injured person over without first examining them or asking if they have pain in their lower back or neck, or any other complaints. Do not help them stand up.
- Remember that a patient with lower back pain may have a fracture until a definitive diagnosis is made. Treat the injury as if it were a fracture until it is confirmed that there is no fracture.
- If you suspect a spinal fracture, place a wide board or door beneath the injured person without moving them from their position.
- If you suspect a spinal fracture, place a wide board or door beneath the injured person without moving them from their position.

FIRST AID FOR SPINAL FRACTURES

- Prevent the neck from moving by placing the injured person's shoes and folded clothing on both sides of the head and neck. If you have a sandbag, you can use that as well. You can make a sandbag by filling a plastic bag with sand or soil.

- Secure the injured person to the board with wide strips of cloth, wrapping them around the shoulders, thighs, below the knees, and around the ankles. Carry them this way. Do not help them stand up until an X-ray has been taken and it has been confirmed that there is definitely no fracture.

- Otherwise, a spinal fracture that might otherwise heal on its own could result in spinal cord injury due to a rough examination of the injured person, standing them up, or improper transport conditions . This could lead to serious consequences such as paralysis in the legs, weakness, and the inability to control urination and bowel movements.

- If there is a wound, apply a sterile dressing.

- Take appropriate measures depending on the severity of the shock.

- Relieve the pain.

FIRST AID FOR FOREARM FRACTURES

- At the scene of the accident, without removing the injured person's jacket, position the arm so that the hand on the fractured side rests on the opposite shoulder, place it across the chest, and wrap it around the chest.

- The forearm should also be suspended vertically using three layers of bandage or gauze.

- If you have ready-made splints or pieces of wood or thick cardboard on hand, apply them to both sides of the arm or forearm. Tear a piece from your shirt, tie, scarf, or bandage, and secure them above and below the fracture site.

FIRST AID FOR FOREARM FRACTURES

Suspending the Arm

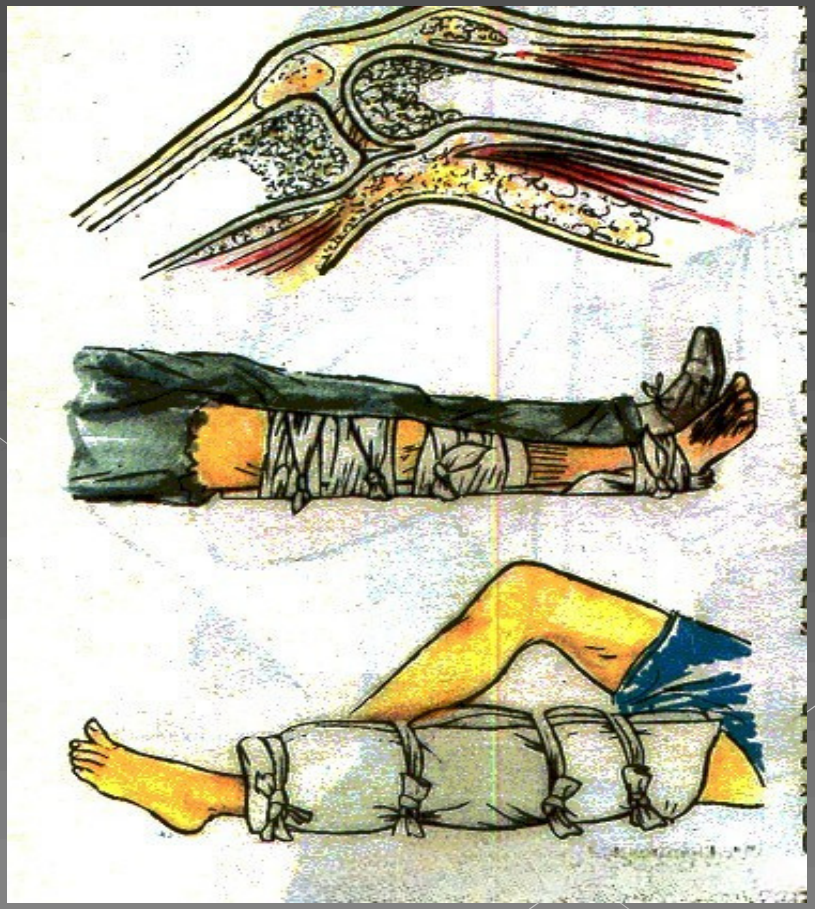
- Place the arm across your chest and wrap it with another scarf or a triangular bandage.
- Suspend the forearm vertically using a triangular bandage, gauze, or scarf.
- Make sure your forearm and arm remain above heart level. This will minimize swelling.
- Apply ice to the fracture site.
- Any bracelets should be removed.

FIRST AID FOR LEG FRACTURES

- If there is a broken leg, do not attempt to remove the injured person's pants at the scene of the accident.
- If there is a wound, unstitch or cut the pants along the seam. Place a clean handkerchief or dressing over the wound and wrap it securely. This will prevent bacteria from entering an open fracture and help stop the bleeding.
- If you have a long piece of wood or thick cardboard, place the longer one on the outside, extending from the ankle to the waist, and the shorter one on the inside, extending from the ankle to the groin.
- Secure them with a piece of shirt, a scarf, a tie, or a bandage above and below the knee and across the ankle.

FIRST AID FOR LEG FRACTURES

- If you have ready-to-use immobilization equipment or tools, place a folded cloth or cotton inside, gently position the leg inside, and then wrap it securely.
- If you do not have any immobilization equipment, immobilize the broken leg by wrapping it around the healthy leg.
- Apply ice to the fracture site.
- Transport the person to the hospital on a stretcher while they are lying on their back.



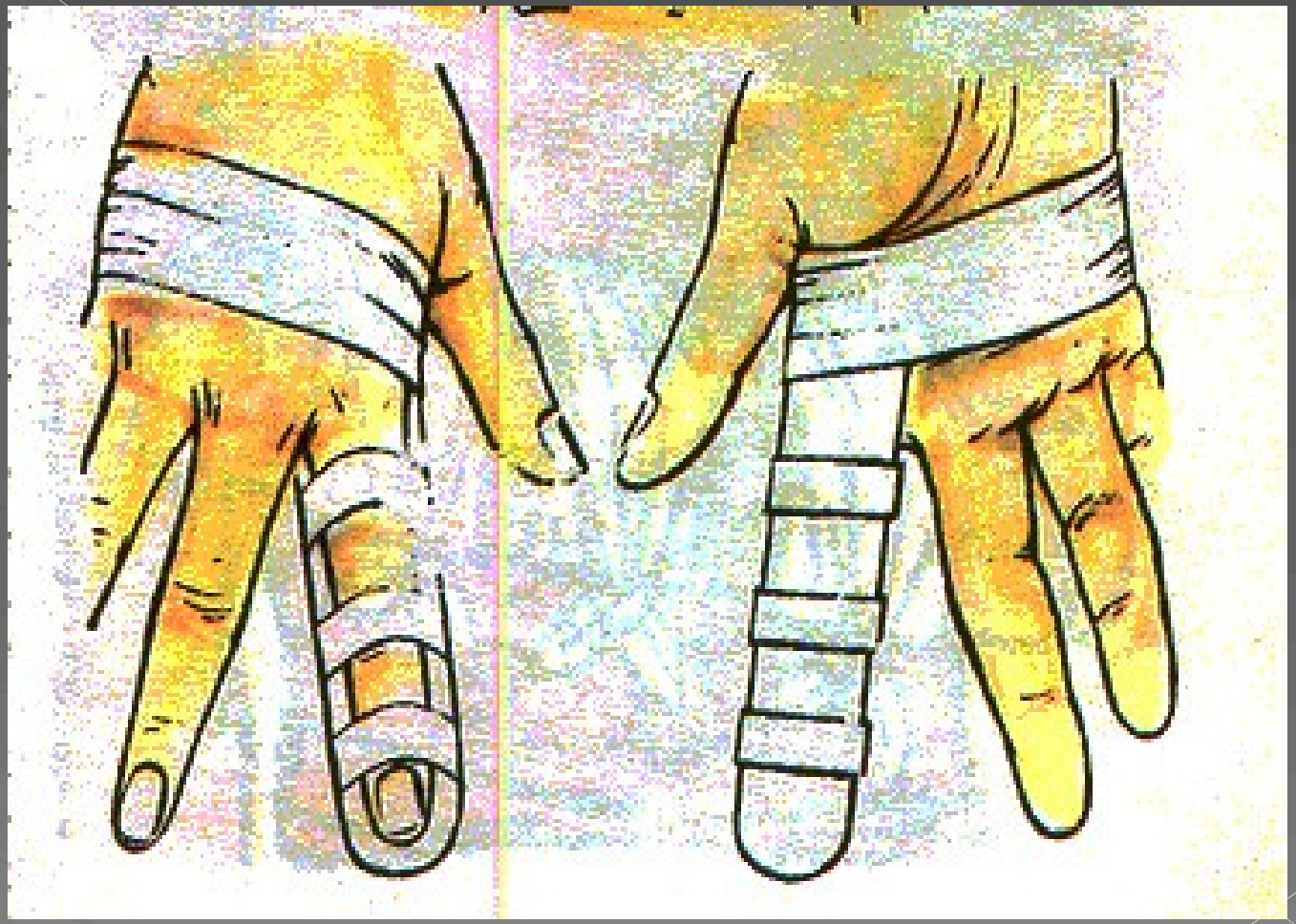
FIRST AID FOR FOOT AND ANKLE FRACTURES

- Place a clean handkerchief or dressing over the wounds on the injured foot and wrap it.
- Place the foot in the center of a soft, square-shaped pillow.
- Bring the edges of the pillow together at the front and secure them with a safety pin. If necessary, wrap it with a bandage.
- Apply ice before placing the foot inside the pillow.
- Keep the foot elevated above heart level.

FIRST AID FOR FINGER FRACTURES

- Place a piece of wood the width of a finger—or, if available, a narrow aluminum splint—under the broken finger and wrap it securely. If necessary, immobilize the broken finger by taping or wrapping it to the adjacent healthy finger.
- Keep the injured side above heart level.
- Apply ice to the fracture site.
- If there is pain, give pain relievers.
- Take the patient to the hospital.
- Any ring on the finger must be cut off and removed. (The ring can cause swelling. If the ring remains on the finger, it can constrict the finger and lead to gangrene.)

FIRST AID FOR FINGER FRACTURES



DISLOCATION

A dislocation is the displacement of the parts that make up a joint, resulting in the disruption of the normal joint relationship.

A dislocation involves injury to the ligaments and joint capsule. The causes are the same as those for a fracture.

Symptoms

- Pain
- Swelling, bruising
- Limited movement
- Deformity

First Aid

- Do not attempt to put a dislocated bone back into place.
- Secure it in its current position.
- If possible, elevate the affected area above heart level.

SPRAIN

A sprain is the partial, temporary dislocation of a joint due to twisting or stretching, resulting in the stretching or tearing of the joint ligaments.

Symptoms

- Pain, tenderness
- Swelling, bruising
- Limited movement

First Aid

- Do not move the injured person
- Apply cold
- If the sprain is in the ankle, elevate the foot by placing
  2–3 pillows underneath it
- Do not massage the area, do not move it, and immobilize it.
- Even if the injury looks like a sprain, remember that it could be a dislocation or a fracture.
- Be sure to go to the hospital.

CRAMPS

What to do:

- Lay the person down calmly.
- With one hand, hold the tip of the cramped foot and try to return it to its normal position by bending it upward. With your other hand, apply light pressure to the calf.
- If you're swimming, lie on your back and rest. Try to swim on your back to reach shore.
- Pinch the cramped muscle in several places.
- Gently tap the cramped muscle with the edge of your hand.
- Rub the cramped muscle with the palm of your hand.
- Apply heat by placing a hot water bottle wrapped in a towel on the cramped muscle. Then massage the area again.

CRAMPS

- Apply heat by placing a hot water bottle wrapped in a towel on the cramped muscle. Then massage it again.
- Cramps may be caused by water and salt loss due to excessive heat. Mix about a quarter teaspoon of salt into 1 liter of water or ayran and have the person drink it.
- Keep in mind that muscle cramps can occur while swimming in the sea.
-
- Never go into the water after drinking alcohol. at sea .
- After the cramp subsides, stretch the muscles in your foot and calf that were affected by the cramp.

LOWER BACK PAIN

- You can apply heat to your lower back. You can take pain relievers and muscle relaxants.
- Do not strain, pull, push, or lift heavy objects. Do not twist your lower back.
- If you are constipated, take a laxative.
- When getting out of bed, slowly roll onto your side and then sit up.
  You may find significant relief by holding onto a doorframe or a metal pipe at that height and letting your body hang down.
- See an orthopedic and trauma specialist or a physical therapist to determine the cause of your back pain.

BURNS

A burn is defined as damage to the integrity of the skin.

The skin is a sensory organ that receives sensations of touch, cold, heat, and pain, and contains nerves and blood vessels. Loss of skin creates a predisposition to infection.

BURNS

Symptoms

- Fire, flames, boiling water, steam, hot oil
- Sunlight, radiation
- Electric current, lightning strike
- Chemical substances

First Aid

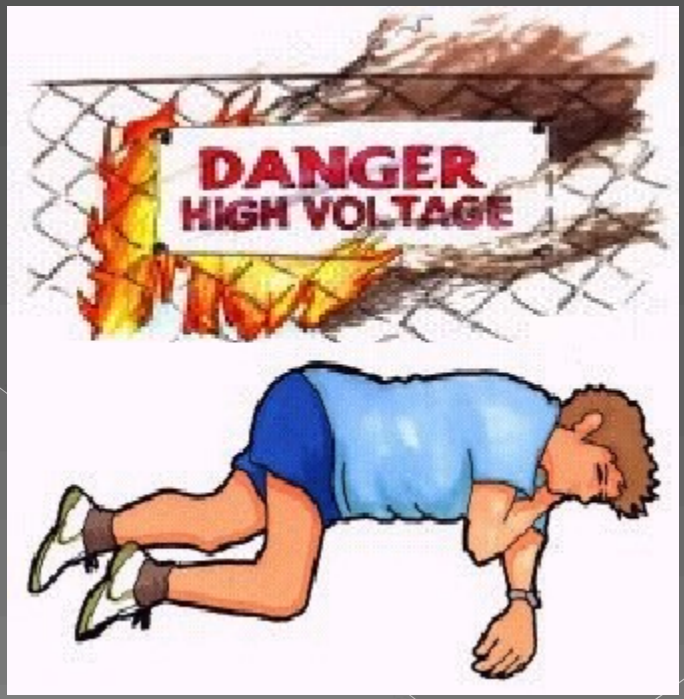
- There is pain at the burn site
- Redness, blistering, and peeling of the skin may be observed
- In deep burns, the skin takes on a pale color, sometimes turns black, and becomes numb.
- Signs of shock may be present.

BURNS - FIRSTSTEP

THE FIRST STEP

IS TO MOVE THE VICTIM TO A SAFE PLACE.

- The goal is to get ourselves and the patient or injured person out of the danger zone as quickly as possible.
- They are moved to a safe place where we can begin first aid.
- While moving them, remain calm and, if possible, support them on their stronger side.



BURNS - FIRST AID

In general

- To extinguish the fire and prevent further injury
- To prevent infection and shock
- To relieve pain

Minor burns:

- Hold the burned area under running water or soak it in cold water until the pain subsides (for at least 10 minutes).
- Remove jewelry such as rings, bracelets, and watches before swelling begins.
- Cover the burn with a clean, damp cloth

SEVERE BURNS

- **Severe burns:**

- Lay the patient down so that the burned area does not touch the ground.
- Pour cold water over the burn.
- If the burn is on a limb such as an arm or leg, elevate it to prevent swelling.
- Remove any jewelry from the injured person and take off any tight clothing.
- If the burn is caused by scalding (boiling water), remove any wet clothing. Cover the burn with a clean, damp cloth.
- Fluid loss from the burn site can lead to shock. Therefore, try to prevent shock If the injured person is unconscious, keep their airway open.

BURNS - CAUTION

⊙ CAUTION!!!

- Never burst blisters filled with fluid, and do not remove pieces of the burned skin.
- Do not try to remove clothing that is stuck to the skin.
- Do not apply substances such as lotions, cologne, ointments, oils, toothpaste, or yogurt.
- Do not apply powder or similar absorbent substances.

BURNS - FIRST AID

Immerse the area in cold water

or

Apply a cold cloth

BURNS CAUSED BY FIRE

- In case of fire, rescue operations should be carried out before extinguishing the fire
- To minimize exposure to heat and smoke, grasp the person under the arms and drag them along the ground to safety
- If the victim is still on fire, immediately lay them on the ground to prevent the flames from spreading upward
- Pour water on the victim or wrap them in a coat, blanket, etc., to cut off the burning area's contact with air
- Call 110 and 112 without delay
- If you're alone and face a fire hazard, roll on the ground to try to extinguish the flames.

MOUTH AND THROAT BURNS

- Burns to the mouth and throat can result from ingesting a boiling substance, inhaling a chemical, or breathing in hot air. Swelling of the tissues can quickly block the airway, leading to suffocation.

First aid

- Remove any tight clothing or fabrics from the patient's neck
- If the patient is conscious, give them cold water at intervals
- Keep the airway open

CHEMICAL BURNS

- Chemical burns caused by strong chemicals that come into contact with the skin or clothing can penetrate the body and cause serious damage.

First aid

- Remove the chemical
- First, thoroughly brush or wipe away any powdered chemical from the body using a brush or dry cloth
- Rinse the affected area under a slow-running faucet (for at least 10 minutes)
- Cover the burn with a dry, clean cloth
- Remove any clothing contaminated with the substance
- Be sure to take the victim to the hospital

CHEMICAL BURNS

- Rinse the area affected by the chemical.
- Rinse the affected area with slightly running water for at least 20 minutes.
- Avoid water.
- During rinsing, remove any clothing and jewelry.

CHEMICAL BURNS IN THE EYE

- Symptoms include pain, a burning sensation, sensitivity to light, redness, and watery eyes.
- The chemical substance in the eye must be rinsed out with clean water. Rinse the affected eye under a gently running faucet.
- To prevent the chemical from splashing, make sure the water flowing from the rinsed eye does not come into contact with the uninjured eye. Therefore, hold the patient so that the uninjured eye is positioned higher and place a compress over it.
- Transport the patient to the hospital with compresses placed over both eyes

ELECTRICAL BURNS

In cases of electrical burns resulting from contact with an electrical current:

- Tissue damage is much more extensive than the burn visible on the skin.
- Cardiac and respiratory arrest may also occur alongside the burn.
- There is tissue damage and a burn wound at the entry and exit points of the current.
- As a result of the electric shock, the patient may fall to the ground, leading to fractures, dislocations, and other injuries.

First Aid

- Remove the victim from the source of electricity (turn off the circuit breaker, unplug the cord, or move the wire away using a non-conductive object)
- Keep the airway open and, if necessary, begin CPR.

No matter how strong the current is, be sure to take the patient to the hospital.

WARNING!!!

- Always turn off the power at the main circuit breaker before performing any electrical repairs
- Do not touch electrical outlets with wet hands

Do not touch a person who has been electrocuted until the power is turned off.

BURNS - GENERAL PRECAUTIONS

- In a fire, smoke and hot gases rise upward. Therefore, move close to the floor by crouching or crawling.
- When evacuating the fire area, do not use the elevator under any circumstances.
- If a person's clothing catches fire, prevent them from running.
- Have the person stop, drop, and roll on the ground to help smother the flames.
- If possible, cover the person with a coat, blanket, rug, or fire blanket while protecting their face.
- After the flames are extinguished, remove loose clothing and jewelry near the burned area.
- Do not remove clothing that is stuck to the skin. If necessary, cut around the stuck fabric. Rinse the burned area with plenty of cool running water.
- Call emergency medical services or take the patient to the nearest hospital if needed.

THANK YOU