



Unit 8

Wounds & Circulation

Learning Outcomes

By the end of this unit the learner will be able to:

- ✓ Provide potentially life-saving first aid where a casualty is bleeding heavily
- ✓ Identify the potential signs and symptoms of internal bleeding
- ✓ Offer help and support in the event of a crush injury until emergency services arrive

Unit 8

Wounds & Circulation

Bleeding

Bleeding is usually minor in nature but can sometimes impose serious threat if a large vein or artery has been injured.

External bleeding

Background

Generally, bleeding is of a minor nature and includes small cuts, grazes, etc. However, bleeding may be severe and life threatening if a large vein or artery has been injured – e.g. the jugular vein in the neck.

Some wounds are associated with other injuries beneath the skin – e.g. an organ injured by a stabbing; broken bones which have pierced the skin.

Symptoms and signs – Not all may be present

- a wound with, or without, an embedded foreign object
- pain from skin surface wounds
- bruising or discolouration of the skin
- loss of normal function in the injured area
- pale, cold, sweaty skin

What to Do

1. Apply direct pressure to the bleeding wound

- Apply firm pressure over the wound. Use a sterile or clean bulky pad and apply it firmly with hand pressure. Apply a bandage to keep the dressing in place.
- If bleeding is severe, DO NOT waste time looking for suitable padding, but be prepared to use the patient's hand or your hand to hold the wound together if the patient is unable to do this unaided.



2. Raise the Injured Area

- If the wound is on a limb, raise it in a supported position to reduce blood flow to the injured area.
- If an arm is injured, you could apply an arm sling or elevation sling.
- Try to avoid any direct contact with the patient's blood or other body fluids. Use disposable gloves if possible. If gloves are not available, place your hands inside a plastic bag.
- If there has been any contact with blood or any other body fluids, wash your hands or any blood splashed on the skin thoroughly with soap and water as soon as possible after the incident.
- If you are concerned about a possible risk of infection, obtain advice from your doctor as soon as possible.



3. If a Foreign Body is Embedded in the Wound

- DO NOT remove it but apply padding on either side of the object and build it up to avoid pressure on the foreign body.
- Hold the padding firmly in place with a roller bandage or folded triangular bandage applied in a criss-cross method to avoid pressure on the object.

4. Keep the Patient at Total Rest

- Even if the injury involves the arm or upper part of the body, the patient should rest in a position of greatest comfort for at least 10 minutes to help control the bleeding.

5. Seek Medical Assistance

- If the wound appears to be minor and the patient is able to travel by car, arrange an urgent appointment with a local doctor to assess and treat the injury.

If the injury is severe or the patient is very unwell – call 999 for an ambulance as soon as possible.

While waiting for an ambulance to arrive, observe the patient closely for any change in condition.

6. If blood leaks through the pressure pad and bandage

- Apply a second pad over the first. Use a tea towel or similar bulky fabric and apply maximum pressure to the area.
- For major uncontrolled bleeding quickly remove the blood-soaked pad and bandage and replace with a fresh bulky pad and bandage. The continuing bleeding may be due to the pad slipping out of position when the first bandage was applied.

Crush injury

Background

A crush injury occurs from compression of large muscle groups and soft tissues by a heavy weight. The most serious sites for a crush injury to occur are the head, neck, chest, abdomen and thigh.

How you can help

Call 999 for an ambulance.

1. Remove the crushing force

- Remove the crushing force if possible because permanent tissue damage may occur with severe crushing force.
- If the crushing force has been in place for some time, be prepared to give prompt first aid, because removal of the crushing force may cause a sudden collapse or deterioration in the patient's condition.

2. Treat the patient's injuries

- Assess and treat any injuries in order of their importance.
- Control any bleeding with a sterile pad applied firmly to the injured area.
- Assist the patient into the position of greatest comfort and use soft padding to provide support for the injured part.
- If a limb is involved, support and immobilise the injured area.
- While waiting for the ambulance to arrive, observe the patient closely for any change in condition.

Nosebleed

Bleeding from the nose most commonly occurs when tiny blood vessels inside the nostrils are ruptured, either by a blow to the nose, or as a result of sneezing, picking, or blowing the nose. Nosebleeds may also occur as a result of high blood pressure and anticlotting medication.

A nosebleed can be serious if the casualty loses a lot of blood. In addition, if bleeding follows a head injury, the blood may appear thin and watery. The latter is a very serious sign because it indicates that the skull is fractured and fluid is leaking from around the brain.

Caution

- Do not let the casualty tip his head back because blood may then run down the throat and induce vomiting.

Your Aims

- To maintain an open airway
- To control bleeding



What to Do

1. Tell the casualty to sit down and tilt his head forward to allow the blood to drain from the nostrils. Ask him to breathe through his mouth (this will have a calming effect) and to pinch the soft part of his nose for up to ten minutes, holding constant pressure. Reassure and help him if necessary.
2. Advise the casualty not to speak, swallow, cough, spit, or sniff since this may disturb blood clots that have formed in the nose. Give him a clean cloth or tissue to mop up any dribbling.
3. After ten minutes, tell the casualty to release the pressure. If the bleeding has not stopped, tell him to reapply the pressure for two further periods of ten minutes.
4. Once the bleeding has stopped, and with the casualty still leaning forward, clean around his nose with lukewarm water. Advise him to rest quietly for a few hours. Tell him to avoid exertion and, in particular, not to blow his nose, because this could disturb any clots.
5. If bleeding stops and then restarts, help the casualty reapply pressure.
6. If the nosebleed is severe, or if it lasts longer than 30 minutes, arrange to take or send the casualty to the hospital.

Special Case for a Young Child

A child may be worried by a nosebleed. Tell her to lean forward, and then pinch her nose for her, reassure her, and give her a bowl to spit or dribble into.

Internal Bleeding

Background

Internal bleeding is often difficult for the first aider to recognise. This type of bleeding can occur without an obvious wound and can be very serious as it is difficult to stop without surgical intervention.

Internal bleeding occurs when blood vessels within the body are ruptured and blood escapes out of the circulatory system. It may follow such incidents as a blow to the head, chest, or abdomen due to a fall or being struck by a vehicle. Internal bleeding should be suspected when blood is seen in vomit, urine, sputum or faeces.

Symptoms and signs – Not all may be Present

- rapid and 'gaspings' breaths
- increasing thirst
- frothy red blood coughed up from the lungs, blood-stained vomit like 'coffee grounds', red or rust-coloured urine, or dark faeces like tar
- pale, cold, sweaty skin

How you can help

1. Place the Patient at Total Rest

- Assist the patient into the position of greatest comfort.
- Cover the patient with a blanket to maintain body heat.
- Place protective fabric underneath the patient if the surface is rough, cold or hot – e.g. a coat if the patient is lying on a road.

Call 999 for an Ambulance.

1. While waiting for the ambulance

- Manage any other injuries.
- Ensure that all restrictive clothing has been loosened, especially at the neck and waist.
- Keep any bystanders clear.
- Reassure the patient.
- DO NOT allow the patient to eat, drink or smoke.

Shock

Shock - not to be confused with emotional shock – is a life-threatening condition. It happens when the body isn't getting enough oxygen to the vital organs.

What is Shock?

- Shock can be caused by anything that reduces the flow of blood, such as:
- severe internal or external bleeding
- heart problems, such as a heart attack, or heart failure
- loss of body fluids, from dehydration, diarrhoea, vomiting, or burns
- severe allergic reactions and overwhelming infection (septic shock)
- spinal cord injury.

Signs and Symptoms

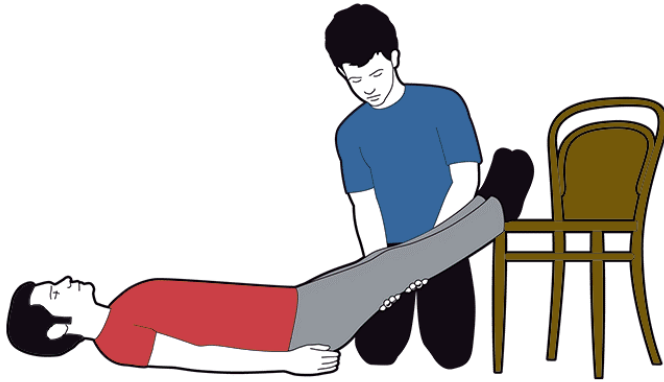
Look for:

- pale skin, which may be cold and clammy
- sweating
- fast pulse - as shock gets worse
- fast, shallow breathing
- a weak pulse
- grey blue skin, especially inside the lips
- nausea and possible vomiting - as the brains oxygen supply decreases
- restlessness and aggressive behaviour
- yawning and gasping for air
- the casualty could become unresponsive.

What to do



First, treat any cause of shock that you can see or that you have identified from the primary survey, such as severe bleeding.



Then help the casualty to lie down. Raise the casualty's legs, supporting them on a chair, as this will help to improve the blood supply to their vital organs.

If available, lay them down on a rug or blanket to protect them from the cold.



Call 999 or 112 for emergency help and tell ambulance control you think they are in shock. If possible, explain what you think caused it.



Loosen any tight clothing around the neck, chest, and waist to make sure it doesn't constrict their blood flow.



While waiting for help to arrive, cover them with a coat or blanket to help keep them warm. Remember, fear and pain can make shock worse by increasing the body's demand for oxygen, so try to reassure the casualty and keep them calm if you can.



Monitor their level of response.

- ✓ *Twelve Essential Healing Crystals: Your first aid manual for preventing and treating common ailments from allergies to toothache Paperback – Large Print, March 3, 2014 by Michael Gienger*
- ✓ *Prescriptive Stretching Paperback – February 24, 2011 by Kristian Berg*