Training Paramedics

Emergency Service 10.2011

WOUND TREATMENT AND WOUND DRESSING



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MeshHp.mn



Small wound



large wound





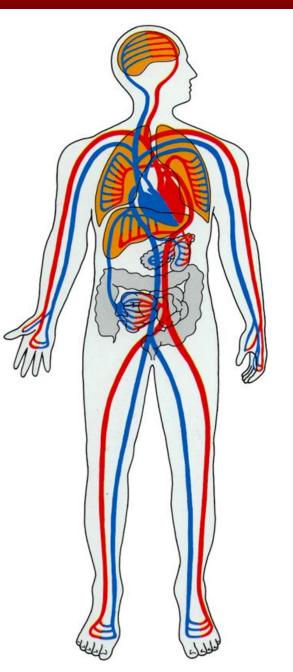
The human blood



What is blood?

Blood is the life-maintaining fluid that circulates through the body's:

- heart
- arteries
- veins
- capillarie





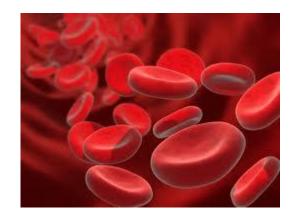
The components of blood

Human blood consists of about 22 percent solids and 78 percent water. One of the main componet of human blood is the blood plasma, in which the blood cells are suspended. The blood plasma includes the following components:

red blood cells (erythrocytes)

carry oxygen from the lungs to the rest of the body.

- white blood cells (leukocytes) help fight infections and aid in the immune process.
- platelets (thrombocytes) help to control bleeding.





The Functions of blood

Blood performs many important functions within the body including:

- Supply of oxygen to tissues (bound to hemoglobin which is carried in red cells)
- Supply of nutrients such as glucose, amino and fatty acids
- Removal of waste such as carbon dioxide, urea and lactic acid
- Immunological functions, including circulation of white blood cells, and detection of foreign material by antibodies
- Coagulation, which is one part of the body's self-repair mechanism (blood clotting after an open wound in order to stop bleeding)
- Messenger functions, including the transport of hormones and the signaling of tissue damage
- Regulation of body pH
- Regulation of the body temperature



Hypovolemic shock

Hypovolemic shock an emergency condition in which severe blood and fluid loss makes the heart unable to pump enough blood to the body. This type of shock can cause many organs to stop working.

Causes:

Losing about 1/5 or more of the normal amount of blood in your body causes hypovolemic shock. Blood loss can be due to:

- •Bleeding from cuts
- •Bleeding from other injuries
- •Internal bleeding, such as in the gastrointestinal tract

The amount of circulating blood in your body may drop when you lose too many other body fluids, which can happen with:

- •Burns
- Diarrhea
- •Excessive perspiration
- Vomiting



Hypovolemic shock

Symptoms

- Anxiety or agitation
- Confusion
- General weakness
- Pale skin color
- Rapid breathing
- Cool moist skin
- Unconsciousness

The greater and more rapid the blood loss, the more severe the symptoms of shock.

Exams and Tests

An examination shows signs of shock, including:

- Low blood pressure
- Low body temperature
- Rapid pulse, often weak and thready



Wound Treatment and wound dressing



The goal of the wound therapy:

- Wound protection
- Protection against germs
- Stop bleedings



Dressings and material for the wound treatment:

- Sterile compresses
- Bandages
- Elastic gauze bandages
- Bandage pack
- Triangular bandage
- Plaster
- Tape
- Gloves
- Handdisinfectant

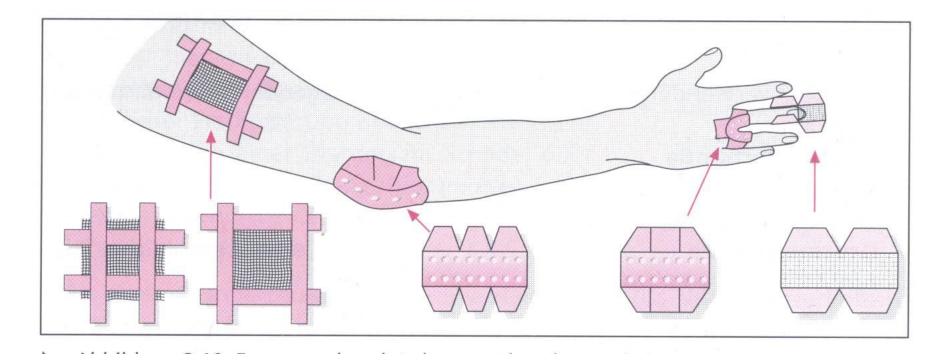


The rules for dressing application:

- Wear gloves
- Work hygienically
- Don`t touch the wound
- No wound manipulation
- Remove loose foreign bodies



Plaster

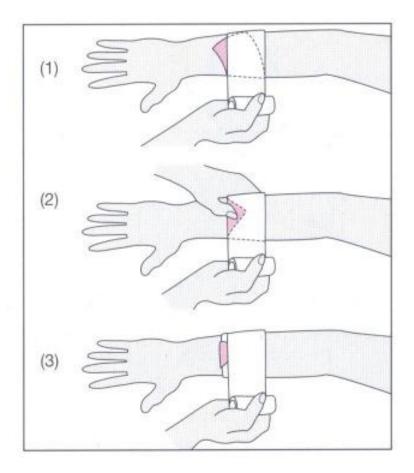


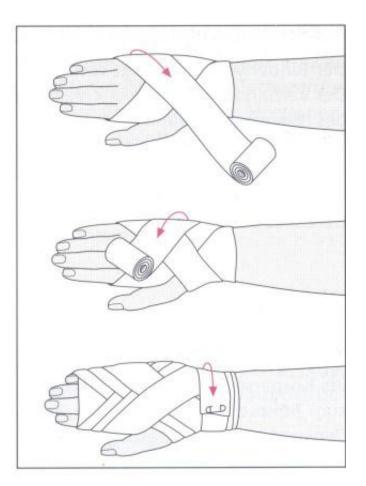
Don`t touch the wound dressing !

Wipe dry moist skin around the wound with a sterile compress, because the plaster will not stick to moist skin



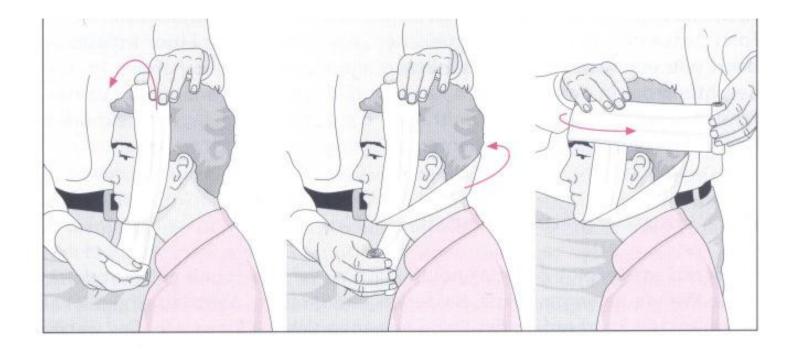
Bandage sb. hand







Bandage sb. head



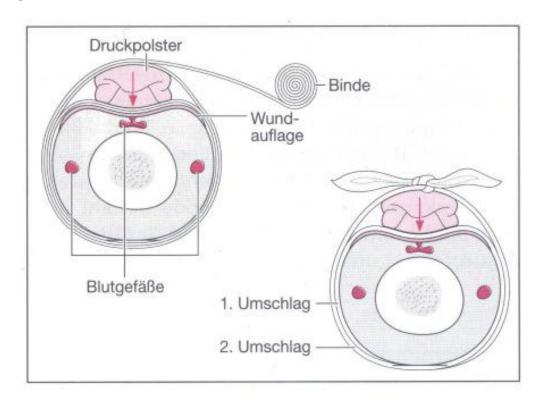


Pressure bandage

Staunching of bleeding

- Suspend bleeding part as high as possible.
- Apply pressure with bandage:

Take a bandage pack or form a thick pad of compresses and apply pressure, tie down with a bandage.

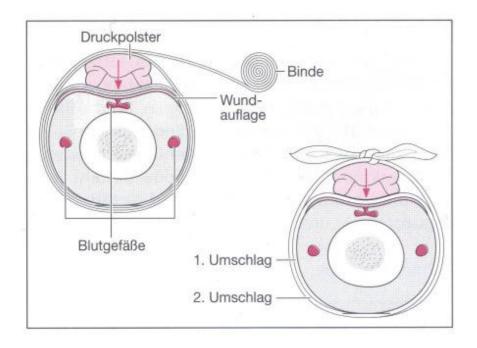




Pressure bandage

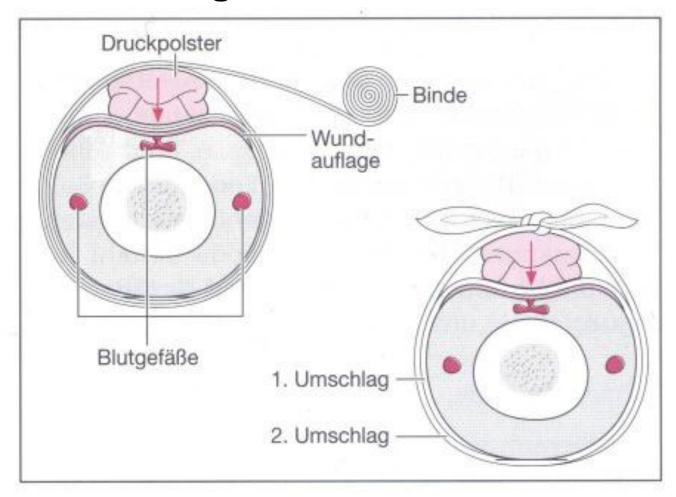
If bleeding does not stop:

- Wrap second layer of bandage over the first
- Apply additional direct pressure on the wound: press artery toward heart over the underlying.



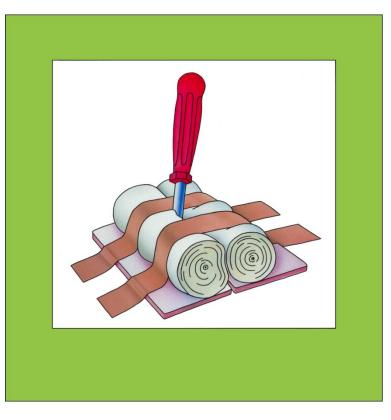


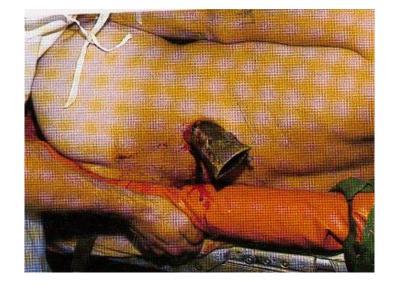
Pressure bandage



With severe bleeding exists the possibility of hypovolemic shock!







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Infektionsgefahren im Einsatzdienst Hygiene

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Infektionsgefahren im Einsatzdienst

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