WOUNDPACKING

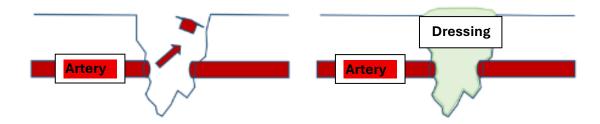
What is woundpacking?

Certain massive bleeding cannot be stopped with a tourniquet because it is beyond the highest point of the limb where another tourniquet can be placed. These are usually points where the neck or a limb is attached to the trunk, hence the name junctional bleeding. The following parts of the body qualify for this:

- Neck (side and attachment to torso)
- Armpit (shoulder, armpit itself, area of shoulder joint)
- Groin (pubic area, transition of thigh)
- Cross

The major blood vessels are not always close to the skin in these areas. Piercings, cuts, etc. can cause large blood vessels to be affected. The penetration of e.g. an object has destroyed tissue and created a kind of opening in which blood vessels are broken.

We can address such injuries by padding the entire wound with specifically designed dressings. The technique may be invasive but is vital to quickly stop massive bleeding.



What dressing?

Common woundpacking dressing is a non-puffy oblong gauze dressing that is usually folded or vacuum compressed in a package. The gauze has a high capilarity, which means it absorbs blood well. This allows the platelets from the blood to provide maximum clotting so that the bleeding is stopped.

With hemostatic dressings, a substance was added to the gauze that will assist the natural clotting of the blood to provide faster clotting. There is debate about the exact added value of hemostatic dressing versus non-hemostatic dressing. Usually these discussions are held on the fringes of commercial views, but medically, hemostatic dressings are preferred. However, the price is a downside: hemostatic dressing costs about ten times that of non-hemostatic dressing. For this reason, plain bandages are in the kits.

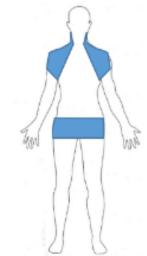
THE TECHNIQUE

Once the massive bleeding in the neck, armpits or crotch area has been identified as non-tourniquetable, it is important to start looking for the (arterial) vein in the wound, where direct pressure can be applied to the blood vessel so that the bleeding stops.

Woundpacking is applied only in the indicated blue areas. Never woundpacking in the abdomen-nor chest cavity, but pressure bandages (see other manuals).

The pressure with which the blood squirts/flows from the blood vessel will usually be clearly felt and indicate to you the correct location. A fair amount of pressure must be applied to stop the bleeding, not infrequently the victim suffers more from this pressure than from the bleeding. Again, try not to take into account the victim's exclamations of pain, he may not realize it but you are saving his life by doing so.

- Take one end of the bandage and take it double, this way you will have a little more volume to start pressing.
- Now, with your free hand, try to insert the dressing into the wound as deeply as possible, seeking contact with the source of the bleeding. You will inevitably have to move your fingers to get the dressing in place, but try to keep the pressure as constant as possible.



Keep in mind that you may encounter bone splinters or shards in the wound, and thus may suffer finger injuries yourself.

- Now try to get as many bandages as possible into the wound (= packing). There are two ways to do this: either keep pressure on the bleeding with one hand and keep adding bandages with your other hand, or keep switching hands to keep pressure on the bleeding. The choice between the two is personal; the important thing is to keep up the pressure.
- When the entire wound is filled with the bandage, make a clot out of the excess to go on top, to hold extra pressure with later. If one dressing proves insufficient to fill the cavity, take another. Tie both ends together and continue packing.
- Now that the wound is filled, maintain constant pressure to clot the wound. With ordinary dressings, 5 minutes is the bare minimum. Only then, first check if blood continues to flow under your hands and check by very gently reducing the pressure on the dressing and observing if blood flows again. If this is the case, immediately put back pressure for 3 or 5 minutes, as before.

After we are sure that our technique has worked, we must make sure that the bandage stays in place and that permanent pressure is applied. We do this e.g. with a pressure bandage or an Israeli pressure dressing. Keep applying pressure until medical services arrive on the scene.