Preparation for emergency

# 12 Do you know how to treat external injures?

It is necessary to do three treatments for external injures: stop bleeding, prevention of bacterial infections, and pain relief.

## **Regular injuries**

Put pressure on the hemorrhaging area with sterilized gauze to stop the bleeding. Apply bandages if necessary. Rinse the wound area with clean water at first if it is dirty. It is effective to cool the wound if it is swelling and throbbing with pain.

### In the case that a main artery is injured

Put pressure on the area of the wounded artery that is closest to the heart with the tip of your finger quickly and tie a tourniquet. Elevate the wound above the level of the heart. Do not various kinds of treatment on the surface of the wound. For example, there is the risk of heavy bleeding when removing things such as pieces of clothes and glass from the wound. In addition, it is necessary to be careful not to try to stop the bleeding so much that it ends up trapping germs inside the body because bleeding helps to release germs out of the body. Use gauze on any wounds, not absorbent cotton. Do not apply band-aids to wounds directly. Do not use anything that will stick to the skin. If you do not have any gauze, you can use a washed handkerchief temporarily.

The chin and face tend to bleed a lot, even small wounds. Since it is difficult for ordinary people other than medical experts to stop main arteries from bleeding by putting pressure on them, try to stop the bleeding by pressure as first-aid such as using gauze, washcloths, and handkerchiefs on the wounded area.

Methods to stop the bleeding 1 : Pressure with finger method	
It is advisable to pressure on the artery closest to the heart without touching the wound.	
Location of wound and corresponding finger pressure area	
Back of the head	
0.8-1.0cm away from the back side of the center of the ear	
• Lower part of the face(chin)	
About 1 cm away from the corner of the lower part of the chin <ul> <li>Upper chin</li> </ul>	
About 1.2-1.5 cm away from the collarbone going toward the chin	
<ul> <li>Armpit (Upper area of the shoulders and arms)</li> </ul>	
Locate the center of the upper part of the collarbone, go inwards, and then put strong pressu on the area toward the first rib.	re
Upper arm and forearm	
<ul><li>Put strong pressure on the inside of the upper arm (the inner part of the biceps) toward the biceps</li><li>Finger</li></ul>	one.
<ul><li>Hold down from both sides at the place near the base of the finger.</li><li>Thighs</li></ul>	
The center or slightly inner side of the line that separates the pelvis and thighs.	
Lower thighs	
In the center of the back part of the knee joint.	
Feet	
Near both sides of the base of each toe	

## Methods to stop the bleeding 2 : Stopping the bleeding with tourniquets method

Use for the thighs and upper arms mainly.

Since it is difficult to stop the bleeding for long time the pressure with finger method, you should use a tourniquet (washcloths, thick rubber tube, or slings can be used) while also carry out the pressure with finger method when you are going to take an injured person to a hospital.

<Things to remember when using tourniquets>

- Do not place tourniquets directly on wounds.
- Tourniquets should be thicker than 10mm.
- If a tourniquet it too loose, it will only stop the flow of blood in the veins and not the arteries. Thus causing blood congestion and more bleeding. Therefore, tourniquets should be applied so that the pulse in the periphery region will be disappeared.
- Use folding slings if you do not have tourniquets.
- When you use tourniquets, do not do any treatment that will cover them up. It is better to attach a tag written the time that you first applied the tourniquet on it and report it to the doctor.
- Loosen up the tourniquet for about five minutes every one hour. During this time, use sterilized gauze on the wound and applies a sufficient amount of pressure.

#### Head injuries

Light cerebral concussion can be cure to stay inactive for several seconds to several minutes. It is essential to be inactive in the case of cerebral contusions and cerebral compressions. The person should lie down flat or be made to lie down after they have regained consciousness. Cool off the person's head and have him/her seen by a specialist (brain surgeon). When transporting the person necessarily, be sure to use a stretcher and do not make him/her walk. It is impossible to differentiate between cerebral concussions and cerebral contusions just by the symptoms. Therefore, the person should be better to see a cerebral nerve surgeon even if he/she has a brief impairment of consciousness. In the case that a wound accompanies the head injury, you should cover the wound by applying gauze to it without touching the inner part of the wound (It has risk to contract cerebral meningitis if germs get into the wound.)

\* Characteristic symptoms

Cerebral contusions: The person will go into shock right away after being injured.

Irregular body temperature, slower pulse, and impaired consciousness (for more than 12 hours, paralysis of facial nerves, and seizures)

Cerebral compressions: The person will lose consciousness suddenly (for several minutes to one or two days) after being injured.