

ANZCOR Guideline 9.1.1 – Principles for the Control of Bleeding for First Aiders

Guideline

Who does this guideline apply to?

This guideline applies to adult, child and infant victims.

Who is the audience for this guideline?

This guideline is for use by bystanders, first aiders and first aid providers.

1 External Bleeding

Usually external bleeding can be controlled by the application of pressure on or near the wound to stop further bleeding until help arrives. The main aim is to reduce blood loss from the victim.

The use of direct pressure is usually the fastest, easiest and most effective way to stop bleeding.^{1,2,3,4} [Class A; LOE II, Class A; LOE III-3] However, in some circumstances, indirect pressure may be used. [Class A; LOE Expert Consensus Opinion]. Other methods should be used if direct pressure does not control severe bleeding. There is no evidence that elevation of a bleeding part aids control of bleeding⁵ and there is the potential to cause more pain or injury.

If there is an obvious embedded object, use indirect pressure. [Class A; LOE Expert Consensus Opinion]

1.1 Management

- Use standard precautions (eg gloves, protective glasses) if readily available.
- Attempt to stop the bleeding by applying sustained direct or indirect pressure on or near the wound as appropriate.
- Lie the patient down if bleeding from the lower limb or severe bleeding.
- If severe bleeding not controlled by above measures, use a haemostatic dressing if available and trained in its use (CoSTR 2015: weak recommendation/very low quality evidence)⁵.
- If severe bleeding not controlled by above measures, use a tourniquet above bleeding point if available and trained in its use (CoSTR 2015: weak recommendation/low quality evidence)⁵.
- **Call an ambulance.**
- If the victim is unresponsive and not breathing normally, follow the Basic Life Support Flowchart (ANZCOR Guideline 8).

The need to control the bleeding is paramount. The risks associated with the use of haemostatic dressings or a tourniquet are less than the risk of uncontrolled severe bleeding, though these are temporizing measures and transfer to hospital remains of high importance.

1.2 Direct Pressure Method

Where the bleeding point is identified control bleeding by applying pressure as follows:

- apply firm, direct pressure sufficient to stop the bleeding
- apply pressure using hands or a pad ensuring that sufficient pressure is maintained and that the pressure remains over the wound. If bleeding continues, apply another pad and a tighter dressing over the wound.

To assist in controlling bleeding, where possible:

- restrict movement
- immobilise the part
- advise the victim to remain at total rest.

If bleeding continues it may be necessary to remove the pad(s) to ensure that a specific bleeding point has not been missed. The aim is to press over a small area and thus achieve greater pressure over the bleeding point. For this reason an unsuccessful pressure dressing may be removed to allow a more direct pressure pad and dressing on the bleeding location.

1.3 Tourniquet

Tourniquets should only be used for life threatening bleeding from a limb that cannot be controlled by direct pressure. A wide bandage (of at least 5cm) can be used as a tourniquet 5-7 cm above the bleeding point. The bandage should be tight enough to stop all circulation to the injured limb and control the bleeding. The time of application must be noted and passed on to emergency/ambulance personnel. Once applied, the victim requires urgent transfer to hospital and the tourniquet should not be removed until the victim receives specialist care.

A tourniquet **should not** be applied over a joint or wound, and must not be covered up by any bandage or clothing.

1.4 Indirect Pressure Methods

Embedded Objects

- Do not remove the embedded object because it may be plugging the wound and restricting bleeding.
- Place padding around or above and below the object and apply pressure over the pads.

2 Internal Bleeding

2.1 Recognition

Internal bleeding may be difficult to recognise, but should always be suspected where there are symptoms and signs of shock (ANZCOR Guideline 9.2.3).

It includes bruising, haematomas and the internal bleeding associated with fractures. Severe bleeding may occur from complications of pregnancy.

Symptoms and signs may include:

- pain, tenderness or swelling over or around the affected area
- the appearance of blood from a body opening, e.g.:
 - bright red and/or frothy blood coughed up from the lungs
 - vomited blood which may be bright red or dark brown "coffee grounds"
 - blood-stained urine
 - vaginal bleeding or bleeding from the penis
 - rectal bleeding which may be bright red or black and "tarry".

2.2 Management

Internal bleeding may be life-threatening and requires urgent treatment in hospital.

- Call an ambulance.

3 Nose Bleed (Epistaxis)

For a nose bleed:

- pressure must be applied over the soft part of the nostrils, below the bridge of the nose
- the victim should lean with the head forward to avoid blood flowing down the throat
- the victim should remain seated at total rest for at least 10 minutes. On a hot day or after exercise, it might be necessary to maintain pressure for at least 20 minutes
- if bleeding continues for more than 20 minutes seek medical assistance.

4 Closed Bleeding In Limbs

If bruising to a limb and no external bleeding, use cold pack and pressure if available (CoSTR 2015: weak recommendation/low quality evidence)⁵.

5 Management of All Bleeding

Apply the following measures until ambulance arrival:

- reassure the victim
- assist victim into position of comfort
- monitor the signs of life at frequent intervals
- administer oxygen if available and trained to do so (ANZCOR Guideline 10.4)
- **Do Not** give anything orally, including medications and/or alcohol.

References

1. First Aid Science Advisory Board. Part 10: First Aid. *Circulation*, 2005.**112**:115-125.
2. Walker S.B., Cleary S., Higgins M. Comparison of the FemoStop device and manual pressure in reducing groin puncture site complications following coronary angioplasty and coronary stent placement. *International Journal of Nursing Practice*. Dec. 2001. **7**(6):366-75.
3. Simon A., Bumgarner B., Clark K., Israel S. Manual versus mechanical compression for femoral artery hemostasis after cardiac catheterization. *American Journal of Critical Care*. Jul 1998. **7**(4):308-13.
4. Naimer S.A., Chemla F. Elastic adhesive dressing treatment of bleeding wounds in trauma victims. *American Journal of Emergency Medicine*. 2000.**18**:816-819.
5. Zideman, D. A., Singletary, E. M., De Buck, E.,et al. (2015). Part 9: First aid: 2015 International Consensus on First Aid Science with Treatment Recommendations. *Resuscitation*, *95*, e225. [http://www.cprguidelines.eu/assets/downloads/costr/S0300-9572\(15\)00368-8_main.pdf](http://www.cprguidelines.eu/assets/downloads/costr/S0300-9572(15)00368-8_main.pdf)
Accessed 21/11/2015

Further Reading

ANZCOR Guideline 9.2.3 Shock

ANZCOR Guideline 9.1.4 Head Injury

ANZCOR Guideline 10.4 The Use of Oxygen in Emergencies