

Children's Health Queensland Hospital and Health Service



Pressure Immobilisation Technique – Funnel Web Spider Bite

The pressure-immobilisation first aid technique was developed in the 1970's by Professor Struan Sutherland. Its purpose is to retard the movement of venom from the bite site into the circulation, thus "buying time" for the patient to reach medical care. Research with snake venom has shown that very little venom reaches the blood stream if firm pressure is applied over the bitten area and the limb is immobilised. Pressureimmobilisation was initially developed to treat snakebite, but it is also applicable to bites and stings by some other venomous creatures. It is currently recommended for most life threatening venomous bites and stings in Australia.

Pressure-immobilisation is recommended for:

- all species of Australian snakes, including sea snakes
- funnel web spiders
- blue ringed octopus
- cone shell stings

Do not use pressure-immobilisation first aid for:

- spider bites other than from a funnel web spider
- jelly fish stings
- stonefish and other fish stings
- bites by scorpions, centipedes, beetles

Bites to the lower limb

- 1. Call 000 for an ambulance
- 2. Apply a broad pressure bandage over the bite site as soon as possible. Crepe bandages are ideal, but any flexible material may be used. Clothing, towels etc may be torn into strips. Panty hose have been successfully used.



- 3. Do not take clothing off as the movement of doing so will promote the movement of venom into the blood stream. Keep the patient (and the bitten or stung limb) still.
- 4. Bandage upwards from the lower portion of the bitten or stung limb. Even though a little venom may be squeezed upwards, the bandage will be more comfortable, and therefore can be left in place for longer if required.
- 5. The bandage should be as tight as you would apply to a sprained ankle.



6. Extend the bandage as high as possible up the limb.



7. Apply a splint to the leg. Any rigid object may be used as a splint. e.g. spade, piece of wood or tree branch, rolled up newspapers etc.





- 8. Bind it firmly to as much of the leg as possible.
- 9. Keep the patient still. Lie the patient down to prevent walking or moving around. Have the patient taken immediately by ambulance to the emergency department of the nearest hospital.

(Images: Pressure-immobilisation, courtesy of the Australian Venom Research Unit)

Bites to the hand or forearm

- 1. Call 000 for an ambulance
- 2. Bandage as much of the arm as possible, starting at the fingers
- 3. Use a splint to the elbow
- 4. Use a sling to immobilise the arm
- 5. Keep the patient still. Lie the patient down to prevent walking or moving around. Have the patient taken immediately by ambulance to the emergency department of the nearest hospital.

Bites to the trunk

- 1. Call 000 for an ambulance
- 2. If possible apply firm pressure over the bitten or stung area. Do not restrict chest movement. Keep the patient still. Have the patient taken immediately by ambulance to the emergency department of the nearest hospital.

Bites to the head or neck

- 1. Call 000 for an ambulance
- 2. No first aid for bitten or stung area. Keep the patient still. Have the patient taken immediately by ambulance to the emergency department of the nearest hospital.

Additional information:

• Research stresses the importance of keeping the patient still. This includes all the limbs.

- Do NOT cut or excise the bitten or stung area
- Do NOT apply an arterial tourniquet. (Arterial tourniquets, which cut off the circulation to the limb, are potentially dangerous, and are no longer recommended for any type of bite or sting in Australia.)
- Do NOT wash the bitten or stung area. The type of snake involved may be identified by the detection of venom on the skin.
- Note: Even if the bitten or stung person is ill when first seen, the application of pressure-immobilisation first aid may prevent further absorption of venom from the bite or sting site during transport to hospital.
- If the bandages and splint have been applied correctly, they will be comfortable and may be left on for several hours. They should not be taken off until the patient has reached medical care.
- The treating doctor will decide when to remove the bandages. If a significant amount of venom has been injected, it may move into the blood stream very quickly when the bandages are removed. They should be left in position until appropriate antivenom and resuscitation equipment has been assembled.
- Bandages may be quickly reapplied if clinical deterioration occurs, and left on until antivenom therapy has been effective.