

Notes on Tourniquet use in limb injuries causing significant bleeding

In situations where bleeding from an injured limb cannot be controlled by direct pressure and/or simple pressure bandages, then the use of a proprietary tourniquet is recommended (eg Combat Application Tourniquet - CAT) Note 1

Ad hoc tourniquets can be used if a purpose built/commercial apparatus is not available - but these are inferior. It is important that the tourniquet be at least 25-50mm wide. The wider the tourniquet the better spread of pressure and the less likelihood of damage to the underlying tissues.

The CAT (or similar) tourniquets are designed to be applied single handed: assistance from a first aider will improve placement and function.

They work best when applied to the skin above the wound but can also be applied over clothing if needed.

[CAT Tourniquet | Combat Application Tourniquet](#)

Self explanatory instructional videos are readily available on youtube.

[Combat Application Tourniquet \(C-A-T\) Instructions - YouTube](#)

Concern regarding how many hours the tourniquet can be applied for will be individualised on a case by case basis. Definitive control of bleeding should be commenced as soon as practical and includes removal of foreign bodies, debridement of dead tissue, applying a pressure dressing. (use of haemostatic dressings and tying off or clamping of bleeding arteries is beyond the scope of this review).

Tourniquets are recommended by (note 2):

American College of Surgeons

American College of Emergency Physicians

Advanced Trauma Life Support course

Australian Defence Force

Queensland Ambulance Service

Notes:

1. Simple measures are unlikely to work in an off shore yacht race.
2. online References

[Practical Use of Emergency Tourniquets to Stop Bleeding in Major Limb Trauma... : Journal of Trauma and Acute Care Surgery](#)

[Tourniquet Use Recommendations from the American College of Surgeons - ACEP Now](#)

21/01/2018