

TOURNIQUET CUFF APPLICATION GUIDE

*This Guide was prepared in consultation with James McEwen, PhD, the inventor of automatic tourniquets, to summarize relevant published guidelines and recommendations.**

Select the most appropriate tourniquet cuff considering limb size and shape, and the specific procedure:

- Cuff shape should allow a snug fit at both proximal and distal edges.
- Cuff width should be the greatest width that still assures recommended distances from cuff edges to limb joints and surgical site.
- Cuff length should be the minimum that assures overlap around the limb sufficient to fully engage fasteners.

Use limb protection, ideally a sleeve specifically matched to the selected cuff.

A limb protection sleeve matched to the size and shape of the selected cuff provides the best protection against skin wrinkling, bruising and other soft tissue injuries to the limb beneath the cuff.*

Apply the selected tourniquet cuff snugly on the limb, over limb protection.



A snugly applied cuff allows two fingers easily under the cuff at both proximal and distal edges. If only one finger fits, the cuff is too tight; if three fingers fit, the cuff is too loose.

A loose cuff will require higher pressure to stop blood flow and may slide to an unsafe position on the limb during use. A tight cuff could impede venous return of blood from the limb even when deflated.



After cuff application, the limb distal to the cuff should be exsanguinated by elastic bandage or elevation, as determined by the surgeon.

An automatic tourniquet instrument with modern safety features and audio-visual alarms should be used with the cuff.

The optimum tourniquet pressure for each patient and cuff application can be set or checked by measuring Limb Occlusion Pressure (LOP).*

Intraoperative monitoring of tourniquet safety parameters reduces the risk of complications. During the procedure, it is important to monitor tourniquet pressure and time, and to minimize both.

Upon final deflation of the tourniquet, the tourniquet cuff and underlying limb protection should be immediately removed from the limb.

* Refer to www.tourniquets.org for an expanded guide and relevant references

WARNING: For specific tourniquet instruments and cuffs, always follow manufacturers' instructions.