Hema-T



Comparative Study: Hema-T vs. C.A.T.

Non-routine approach to limb hemorrhage control

Study Objective	Comparison between Hema-T (auto-transfusion) and C.A.T. for combat hemorrhage control.
Study Design	• **Participants:** 35 IDF combat medics (30 men, 5 women, ages 18-21) • **Protocol:** Random assignment on arm and leg • **Evaluation:** Doppler ultrasound verification, timing, pain score, ease of use
Principal Investigators	Maj. Dr. RY • B.Sc. IR • Lt. Col. Dr. DHN • Lt. Col. Dr. AO

Medical Corps, Trauma and Combat Medicine Branch

Study Results: Efficacy and Pain

Comparison between Hema-T and C.A.T.

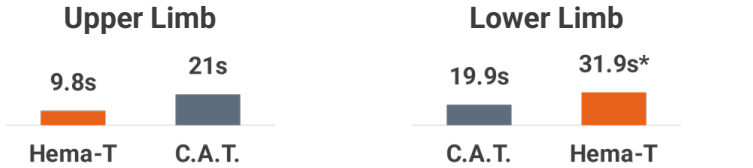
Similar studies:
USA 2022 62%
Israel 2015 78%
success in occlusion

Identical Efficacy: 100% Success

Hema-T ✓ C.A.T. ✓

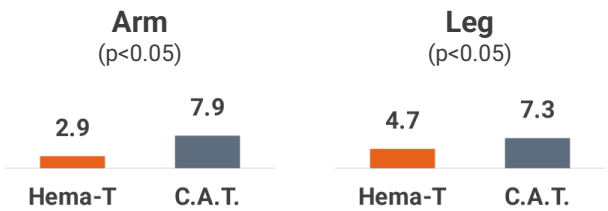
Both tourniquets achieved full arterial occlusion (verified by Doppler).

Application Time



*Hema-T requires shoe removal.

Pain: Significantly lower with Hema-T for arm and leg



~60% reduction in pain scores

Hema-T vs. Existing Standards

vs. C.A.T. Tourniquet

- **Identical Efficacy:** 100% arterial occlusion success rate.
- **Significantly Less Pain:** ~60% reduction in pain scores during application.
- **Dual Function:** Provides both hemorrhage control and auto-transfusion simultaneously.

vs. Whole Blood

- **Immediate Availability:** Applied at the point of injury within seconds.
- **Zero Logistics:** No cold chain, cross-matching, or specialized storage required.
- **Absolute Safety:** Eliminates risks of transfusion reactions and bloodborne pathogens.

Conclusion

Hema-T® offers a safe, effective, and logistically superior alternative for emergency auto-transfusion and hemorrhage control in austere environments, bridging the gap to definitive care.

Hema-T