iTCLAMP™

CLINICAL RESOURCES

Review on hemorrhage control

1. Gruen RL, Brohi K, Schreiber M, Balogh ZJ, Pitt V, Narayan M, et al. Hemorrhage control in severely injured patients. Lancet. 2012 Sep 22;380(9847):1099-108. PubMed PMID: 22998719.

Highlight the need for the iTClamp50 in both military and civilian settings –hemorrhage is a leading cause of preventable death

2. Eastridge B, Mabry R, Seguin P, Cantrell J, Tops T, Uribe P, et al. Death on the battlefield (2001-2011): Implications for the future of combat casualty care. The Journal of Trauma and Acute Care Surgery. 2012;73(6 Suppl 5):S431-S7.
3. Kragh JF, Jr., Murphy C, Dubick MA, Baer DG, Johnson J, Blackbourne LH. New tourniquet device concepts for battlefield hemorrhage control. US Army Medical Department Journal. 2011 Apr-Jun:38-48. PubMed PMID: 21607905. Epub 2011/05/25. eng.
4. Sauaia A, Moore FA, Moore EE, Moser KS, Brennan R, Read RA, et al. Epidemiology of trauma deaths: a reassessment. The Journal of Trauma. 1995 Feb;38(2):185-93. PubMed PMID: 7869433. Epub 1995/02/01. eng.

Selected literature of pre-clinical hemorrhage models – similar studies can be performed with the iTClamp50 to generate additional safety and effectiveness data

5. Acheson EM, Kheirabadi BS, Deguzman R, Dick EJ, Jr., Holcomb JB. Comparison of hemorrhage control agents applied to lethal extremity arterial hemorrhages in swine. The Journal of Trauma. 2005 Oct;59(4):865-74; discussion 74-5. PubMed PMID: 16374275.
6. Kheirabadi BS, Arnaud F, McCarron R, Murdock AD, Hodge DL, Ritter B, et al. Development of a standard swine hemorrhage model for efficacy assessment of topical hemostatic agents. The Journal of Trauma. 2011 Jul;71(1 Suppl):S139-46. PubMed PMID: 21795871. Epub 2011/08/04. eng.
7. Kheirabadi BS, Edens JW, Terrazas IB, Estep JS, Klemcke HG, Dubick MA, et al. Comparison of new hemostatic granules/powders with currently deployed hemostatic products in a lethal model of extremity arterial hemorrhage in swine. The Journal of Trauma. 2009 Feb;66(2):316-26; discussion 27-8. PubMed PMID: 19204503. Epub 2009/02/11. eng.
8. Kheirabadi BS, Mace JE, Terrazas IB, Fedyk CG, Estep JS, Dubick MA, et al. Safety evaluation of new hemostatic agents, smectite granules, and kaolin-coated gauze in a vascular injury wound model in swine. The Journal of Trauma. 2010 Feb;68(2):269-78. PubMed PMID: 20154537. Epub 2010/02/16. eng. - Carotid Artery Model Selected literature to illustrate the limitations of tourniquets.
9. Childers R, Tolentino JC, Leasiolagi J, Wiley N, Liebhardt D, Barbabella S, et al. Tourniquets exposed to the Afghanistan combat environment have decreased efficacy and increased breakage compared to unexposed tourniquets. Military Medicine. 2011 Dec;176(12):1400-3. PubMed PMID: 22338355. Epub 2012/02/18. eng. - Evidence that CATs are less effective when exposed to combat environments and prone to breakage.
10. King DR, van der Wilden G, Kragh JF, Jr., Blackbourne LH. Forward assessment of 79 pre-hospital battlefield tourniquets used in the current war. Journal of Special Operations Medicine: a peer reviewed journal for SOF medical professionals. 2012 Winter;12(4):33-8. PubMed PMID: 23536455. - Provides evidence that most tourniquets are not tight enough; 83% of limbs with a tourniquet in place had a palpable distal pulse upon arrival at a Forward Surgical Team
11. Lakstein D, Blumenfeld A, Sokolov T, Lin G, Bssorai R, Lynn M, et al. Tourniquets for hemorrhage control on the battlefield: a 4-year accumulated experience. The Journal of Trauma. 2003 May;54(5 Suppl):S221-5. PubMed PMID: 12768129. Epub 2003/05/28. eng.