“In this procedural feasibility study, we assessed the ability of 26 U.S. Air Force PJs to perform HH IO placement on fresh, unfixed human cadavers over two consecutive cadaver lab training sessions.” Rush et al (2014).

Reference:

Rush, S., D’Amore, J. and Boccio, E. (2014) A Review of the Evolution of Intraosseous Access in Tactical Settings and a Feasibility Study of a Human Cadaver Model for a Humeral Head Approach. Military Medicine. 179(8S), p.24-28.

Review of the evolution of intraosseous access in tactical settings http://ctt.ec/flnIE+ @ivteam #ivteam

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Abstract:

In the tactical setting, intraosseous (IO) access has become popular to treat hemorrhagic shock when peripheral intravenous access is difficult or impractical. The traditional sites most commonly used by combat medics, corpsmen, and Pararescuemen (PJs) include the sternum and tibial tuberosity. Recent studies have shown that the humeral head (HH) is an appropriate and effective access site for IO infusion and fluid resuscitation in the clinical setting. In this procedural feasibility study, we assessed the ability of 26 U.S. Air Force PJs to perform HH IO placement on fresh, unfixed human cadavers over two consecutive cadaver lab training sessions. Following a formal didactic session, which highlighted proper patient positioning and technique, the PJs were instructed to attempt to place an IO needle using both a drill and manual driver. Once performed, correct placement was reviewed by a physician and confirmed by aspiration of bone marrow. Rates of success were calculated on first and second pass. First pass success rates were 96% and 90.5% for the drill and driver, respectively. Both devices achieved 100% success by the second pass. Military field personnel would benefit from a HH approach, especially in the care and management of patients of explosive injuries.

Other intravenous and vascular access resources that may be of interest (External links – IVTEAM has no responsibility for content).

- Guide for intravenous chemotherapy and associated vascular access devices from Macmillan.
- CancerUK IV chemotherapy information.