Pre-hospital systemic vascular access with early resuscitation in the hypovolemic trauma patient can be problematic and is attempted through venous cut-downs, peripheral IV lines, and/or interosseous routes. This brief report examines an alternative for males via the corpus cavernosum (CC)” Bradley (2016).

Abstract:

BACKGROUND: Pre-hospital systemic vascular access with early resuscitation in the hypovolemic trauma patient can be problematic and is attempted through venous cut-downs, peripheral IV lines, and/or interosseous routes. This brief report examines an alternative for males via the corpus cavernosum (CC).

METHODS: A systematic literature review using certain inclusion criteria including, but not limited to, corpus cavernosum access and resuscitation was conducted and a summary table created.

FINDINGS: The six articles that met criteria revealed quick and easy CC access with rapid flow rates and resuscitation times in both humans and in animal models using either fluids or
blood products. Only one article revealed a complication which was a shaft hematoma that resolved spontaneously over a period of a few days.

DISCUSSION/IMPACT/RECOMMENDATIONS: Systemic vascular access and resuscitation via the CC could be considered as a safe and effective alternative if more traditional techniques fail in an appropriate pre-hospital hypovolemic male casualty (i.e., no genital or pelvic trauma that could interfere with the technique). If further studies are conducted and the technique more robustly validated it could be considered as a possible addition to pre-hospital treatment protocols such as TCCC. Possible publication bias could have been a limitation of this study.

Reference:


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