



Guidelines endorse intravenous (IV) and intraosseous (IO) medication administration for cardiac arrest treatment” Clemency et al (2016).

Abstract:

Introduction: Guidelines endorse intravenous (IV) and intraosseous (IO) medication administration for cardiac arrest treatment. Limited clinical evidence supports this recommendation. A multiagency, retrospective study was performed to determine the association between parenteral access type and return of spontaneous circulation (ROSC) in out of hospital cardiac arrest.

Methods: This was a structured, retrospective chart review of emergency medical services (EMS) records from three agencies. Data was analyzed from adults who suffered OHCA and received epinephrine through EMS established IV or IO access during the 18-month study period. Per regional EMS protocols, choice of parenteral access type was at the provider’s discretion. Non-inferiority analysis was performed comparing the association between first access type attempted and ROSC at time of emergency department arrival.

ReTweet if useful... Intraosseous access for out of hospital cardiac arrest [@ivteam #ivteam](http://ctt.ec/24VsR+)

Click To Tweet

Results: 1310 subjects met inclusion criteria and were included in the analysis. Providers first attempted parenteral access via IV route in 788 (60.15%) subjects. Providers first attempted parenteral access via IO route in 552 (39.85%) subjects. Rates of ROSC at time of ED arrival were 19.67% when IV access was attempted first and 19.92% when IO access was attempted first. An IO first approach was non-inferior to an IV first approach based on the primary end point ROSC at time of emergency department arrival ($p = 0.01$).

Conclusion: An IO first approach was non-inferior to an IV first approach based on the end point ROSC at time of emergency department arrival.

Reference:

Clemency, B., Tanaka, K., May, P., Innes, J., Zagroba, S., Blaszak, J., Hostler, D., Cooney, D., McGee, K. and Lindstrom, H. (2016) Intravenous vs. intraosseous access and return of spontaneous circulation during out of hospital cardiac arrest. The American Journal of Emergency Medicine. October 20th. .

DOI: <http://dx.doi.org/10.1016/j.ajem.2016.10.052>

Thank you to our partners for supporting IVTEAM

