



Intravenous literature: Santos, D., Carron, P.N., Yersin, B. and Pasquier, M. (2012) EZ-IO® intraosseous device implementation in a pre-hospital emergency service: a prospective study and review of the literature. Resuscitation. Nov 14. .

Abstract:

INTRODUCTION: Intraosseous access is increasingly recognised as an effective alternative vascular access to peripheral venous access. We aimed to prospectively study the patients receiving prehospital intraosseous access with the EZ-IO®, and to compare our results with those of the available literature.

METHODS: Every patient who required an intraosseous access with the EZ-IO from January 1(st), 2009 to December 31(st), 2011 was included. The main data collected were: age, sex, indication for intraosseous access, localisation of insertion, success rate, drugs and fluids administered, and complications. All published studies concerning the EZ-IO device were systematically searched and reviewed for comparison.

RESULTS: Fifty-eight patients representing 60 EZ-IO procedures were included. Mean age was 47 years (range 0.5-91), and the success rate was 90%. The main indications were cardiorespiratory arrest (74%), major trauma (12%), and shock (5%). The anterior tibia was the main route. The main drugs administered were adrenaline (epinephrine), atropine and amiodarone. No complications were reported. We identified 30 heterogeneous studies representing 1603 EZ-IO insertions. The patients' characteristics and success rate were

similar to our study. Complications were reported in 13 cases (1.3%).

CONCLUSION: The EZ-IO provides an effective way to achieve vascular access in the pre-hospital setting. Our results were similar to the cumulative results of all studies involving the use of the EZ-IO, and that can be used for comparison for further studies.

