
Abstract:

BACKGROUND: Vascular access is of paramount importance in the care of the critically ill patient. When central or peripheral intravenous access cannot be accomplished in a timely manner, intraosseous access and infusion is a rapid and safe alternative for the delivery of fluids, medications, and blood products. The resurgence of the use of intraosseous access in the 1980s led to the development of new methods and devices that facilitate insertion.

OBJECTIVES: This article discusses general indications, contraindications, and complications of intraosseous access and infusion, focusing on new devices and their insertion.

DISCUSSION: Current research is focused on product innovation and improving drug delivery using intraosseous autoinjectors, finding new anatomic sites for placement, and expanding the use of different intraosseous devices to the adult population.

CONCLUSIONS/SUMMARY: New, improved intraosseous systems provide health care providers with choices beyond traditional manual intraosseous access for administering fluids.