The IO route was successfully secured in all cases with a significant shorter time of vascular access insertion, shorter length of stay and reduction in mortality in IO group vs. IV group (p = 0.001, 0.045, 0.002, respectively)" El-Nawawy et al (2018).

Abstract:

The cornerstone of emergency management of sepsis is early, goal-directed therapy. The purpose of this study was to evaluate the effect of intraosseous (IO) vs. intravenous (IV) access for resuscitation of patients with septic shock admitted to pediatric intensive care unit. This prospective interventional randomized clinical trial study was conducted on 60 patients with septic shock who need rapid administration of fluids and drugs; 30 cases were randomly chosen for IO vascular access, while the other 30 were selected for IV access. The IO route was successfully secured in all cases with a significant shorter time of vascular access insertion, shorter length of stay and reduction in mortality in IO group vs. IV group (p = 0.001, 0.045, 0.002, respectively). In pediatric emergencies, as in case of shock, the use of IO route is recommended to get rapid vascular access as soon as possible, as it revealed better outcome.

Reference: