The objective is to analyze our experience in ultrasound-guided implantation of reservoir type and tunneled catheters, as well as to compare it between both age groups” Reyes Ríos et al (2016).

Abstract:

OBJETIVES: The implantation of long duration intravenous catheters in pediatric population constitutes a challenge due to the size of vascular structures. Because of that, ultrasound is an important tool for vascular accesses in newborns and infants. The objective is to analyze our experience in ultrasound-guided implantation of reservoir type and tunneled catheters, as well as to compare it between both age groups.

MATERIAL AND METHODS: Review of the ultrasound-guided implantable catheters placed from October 2010 to December 2014 in children under 18 months.

RESULTS: 32 devices were placed in 4 neonates and 28 infants. Mean age was of 252 days and mean weight of 6,7 kg. 23 of them were reservoir type devices and 9 tunneled. No statistically significant differences were found for mean surgical time (55 versus 52 minutes). In tunneled catheters implantation there was no difference in surgical time between neonates...
and infants, but there was difference for reservoir type catheters (72 minutes in neonates vs 53 minutes in infants). In 78.5% of infants it was possible to place the catheter in the first puncture, versus 50% of neonates, although it was not statistically significant. As complications, one hematoma and one postoperative infection were described.

CONCLUSIONS: We found that implantation of reservoir type catheters in infants constituted less surgical time compared with neonates, and puncture on left axillary vein was the most effective. Axillary vein ultrasound-guided approach is a safe and reproducible procedure that needs a process of formation and training.

Reference:


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