



Intravenous literature: Guilbert, A.S., Xavier, L., Ammouche, C., Desprez, P., Astruc, D., Diemunsch, P. and Bientz, J. (2013) Supraclavicular Ultrasound-Guided Catheterization of the Subclavian Vein in Pediatric and Neonatal ICU: A Feasibility Study. *Pediatric Critical Care Medicine*. Feb 7. .

Abstract:

**OBJECTIVES:** To assess the feasibility of ultrasound-guided supraclavicular catheterization of the subclavian vein in pediatric and neonatal ICU.

**DESIGN:** Retrospective cohort.

**SETTING:** Ten-bed pediatric medicosurgical ICU and 15-bed neonatal ICU.

**PATIENTS:** Children and newborns undergoing supraclavicular ultrasound-guided subclavian vein catheterization from March 2010 to September 2010.

**MEASUREMENTS:** The placement of central venous catheter in ICU was carried out either by one of the experts in ultrasound-guided puncture of the unit or by a novice completely supervised by the expert. The success and the early complications were recorded. A comparison between novice and expert operators was also made.

**RESULTS:** Forty-two catheters were placed in 40 children. The median age and median

weight were, respectively, 6.5 months and 6.5 09;kg. The success rate was 97.6% (one failure) and the early complication rate was 4.7% (one pneumothorax and one arterial puncture); 61% of children breathed spontaneously during the catheter placement. No significant difference was found between expert and novice operators.

**CONCLUSIONS:** Supraclavicular ultrasound-guided catheterization of the subclavian vein in pediatric and neonatal ICU seems to be a promising technique in the context of emergency. It is safe, reliable, with few early complications. Furthermore, it does not compromise the airways of the patient owing to the low level of sedation needed for its placement.

