

Image-guided CVP placement with SCV access in a pediatric population was performed with high technical success and low complication rate without general anesthesia” Sofue et al (2015).

Reference:

Sofue, K., Arai, Y., Takeuchi, Y., Tsurusaki, M., Sakamoto, N. and Sugimura, K. (2015) Ultrasonography-guided central venous port placement with subclavian vein access in pediatric oncology patients. Journal of Pediatric Surgery. June 3rd. .

Abstract:

BACKGROUND/PURPOSE: To evaluate the technical success and complications of image-guided central venous port (CVP) placement with subclavian vein (SCV) access in pediatric oncology population.

MATERIALS AND METHODS: Ninety-two children (52 boys, 40 girls; mean age, 8.5years) underwent CVP implantation under local anesthesia with conscious sedation. SCV access was firstly attempted under ultrasonographic guidance and CVP implantation was performed under fluoroscopic guidance. Technical success, peri-procedural (<24h) complication, and post-procedural (>24h) complication were assessed.

RESULTS: In total, 102 CVPs were implanted in 92 children with a mean catheter time of 364days (total, 38,224days; range, 14-1911days). In three small children, conversion of SCV access to internal jugular vein access yielded a primary technical success rate of 97.1% and overall technical success rate of 100%. Three minor peri-procedural complications were observed (2.9%) and seven post-procedural infectious complications occurred (infection rate, 6.7%; 0.18/1000 catheter days). No pneumothorax, catheter malposition, venous thrombosis, or mortality occurred.

CONCLUSION: Image-guided CVP placement with SCV access in a pediatric population was performed with high technical success and low complication rate without general anesthesia. This procedure can be taken into account as a choice of procedure when internal jugular venous access is not possible.

Thank you to our partners for supporting IVTEAM