BACKGROUND: The jugular vein cutdown for a totally implantable central venous port (TICVP) has 2 disadvantages: 2 separate incisions are needed and the risk for multiple vein occlusions. We sought to evaluate the feasibility of a cephalic vein (CV) cutdown in children.

METHODS: We prospectively followed patients who underwent a venous cutdown for implantation of a TICVP between Jan. 1, 2002, and Dec. 31, 2006. For patients younger than 8
months, an external jugular vein cutdown was initially tried without attempting a CV cutdown. For patients older than 8 months, a CV cutdown was tried initially. We recorded information on age, weight, outcome of the CV cutdown and complications.

RESULTS: During the study period, 143 patients underwent a venous cutdown for implantation of a TICVP: 25 younger and 118 older than 8 months. The CV cutdown was successful in 73 of 118 trials. The 25th percentile and median body weight for 73 successful cases were 15.4 kg and 28.3 kg, respectively. There was a significant difference in the success rate using the criterion of 15 kg as the cutoff. The overall complication rate was 8.2%.

CONCLUSION: The CV cutdown was an acceptable procedure for TICVP in children. It could be preferentially considered for patients weighing more than 15 kg who require TICVP.

Other intravenous and vascular access resources that may be of interest (External links – IVTEAM has no responsibility for content).

Guide for intravenous chemotherapy and associated vascular access devices from Macmillan. An example of peripheral cannulation OSCE from OSCE Skills.