The single-incision technique for central venous access has comparable procedure time and fluoroscopy time with no difference in complication rates between the two techniques in a pediatric population” Ashton et al (2017).

Abstract:

PURPOSE: A single-incision technique for tunneled central venous access has been described. This study evaluates whether single-incision technique in children is comparable to the conventional method, with regard to procedure time, fluoroscopy time, and complication rate.

MATERIALS AND METHODS: This is a retrospective review of 303 internal jugular vein tunneled central catheter placements whose age ranged from newborn to 17 years (median 1.7 years) by pediatric interventional radiologists from January 2014 through December 2015. 223 catheters were placed (181 patients) using the single-incision technique, and 80 catheters were placed (72 patients) using the conventional two-incision technique. Data were obtained from electronic medical records and PACS including procedure time, fluoroscopy time, and complication rates which were compared for both single-incision and conventional
techniques.

RESULTS: Technical success for the single-incision and conventional technique groups was 99.1 and 98.8%, respectively. Early complication rate was 12.1% for the single-incision technique and 17.5% for the conventional technique (p = 0.254). Overall complication rate was 26% (3.8/1000 line days) for the single-incision technique and 37.5% (4/1000 line days) for the conventional technique (p = 0.085). Median procedure time was 25 min for the single-incision technique and 26 min for the conventional technique (p = 0.427). Median fluoroscopy time was 1.7 min in the single-incision group and 1.3 min in the conventional group (p = 0.085).

CONCLUSION: The single-incision technique for central venous access has comparable procedure time and fluoroscopy time with no difference in complication rates between the two techniques in a pediatric population.

Reference:


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