



The aim of this study is to compare the outcomes of external jugular vein (EJV) and internal jugular vein (IJV) tunneled catheters inserted using the open technique” Alshafei et al (2018).

Abstract:

BACKGROUND/PURPOSE: Tunneled central venous catheters (TCVCs) are commonly used to manage pediatric patients with chronic disease. The aim of this study is to compare the outcomes of external jugular vein (EJV) and internal jugular vein (IJV) tunneled catheters inserted using the open technique.

METHODS: This is a single institution retrospective analysis of patients requiring an IJV or EJV TCVC in the period between 2009 and 2014. Data collected included the following: patient demographics, site/side of insertion, catheter size, number of lumens, duration of catheter in situ, and complications.

RESULTS: A total of 942 TCVCs (690 IJV; 252 EJV) were inserted in 761 patients. No statistical difference was seen between the two groups for procedure indications, age, gender, duration of line in situ, side of insertion, catheter size, number of lumens, and rate of premature catheter removals owing to complications. Rates of infection, blockage, and breakage were similar, but dislodgement was higher in the IJV group. EJV access was successful in 91% of attempts.

CONCLUSIONS: Open EJV TCVC insertion is a safe, quick, and feasible alternative to IJV insertion. EJV access offers comparable outcomes, reduced surgical morbidity, and improved hemostasis especially in children with coagulopathy and/or reduced platelet counts.

TYPE OF STUDY: Retrospective comparative study.

LEVEL OF EVIDENCE: Level 3.

Reference:

Alshafei, A., Tareen, F., Maphango, N., White, D., O'Connor, B. and Sriparan, T. (2018) Open tunneled central line insertion in children - External or internal jugular vein? Journal of Pediatric Surgery. July 9th. .

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