Low Approach Internal Jugular Central Venous Catheters: Optimizing Catheter Performance and Patient Experience

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Background:
An increase in internal jugular (IJ) catheter placement has been identified with the increased use of ultrasound technology for central venous catheter insertion\(^1,2\). This site is often selected for ease of use and accessibility, but has limitations to care and maintenance due to exit site management and natural downward gravity when the catheter is positioned high on the neck. This high internal jugular position renders poor patient satisfaction and requires unscheduled dressing changes due to poor adherence of the dressing or securement device\(^1,2\).

Project:
Ten vascular access clinicians who currently insert IJ polyurethane type central venous catheters were surveyed. This survey identified the percentage of time a low approach is utilized for insertion, overall catheter performance, dressing adherence, patient satisfaction and overall securement method.

Purpose:
To demonstrate safe and efficient low approach IJ insertion allowing adequate catheter securement and dressing maintenance when positioned over the clavicle on the respective insertion side.

Q1. How many years have you been placing ultrasound guided central venous catheters?

Q2. What percentage of the time do you insert IJ catheter in the low approach? (low approach defined as the lower 1/3 of the IJ vessel)

Q3. Please rate the dressing adherence of your last 5 low approach IJ catheters

Q4. For the same five patients please rate the low approach catheter function with the dressing placed over the clavicle.

[Bar charts and diagrams related to the survey responses]
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Results:

10 clinicians were surveyed to include their last 5 IJ procedures (N=50). A low approach internal jugular insertion was performed 89% of the time. Catheter performance remained functional throughout the dwell period. Catheter securement and dressing remained intact and secure over the clavicle. Patient satisfaction was increased and the need for unscheduled dressing changes was minimized or eliminated.

Implications:

Internal jugular insertion requires specific attention to the exit site management, to ensure an intact and stable dressing and reduce risk to patients requiring these devices.

Conclusions:

A low approach internal jugular polyurethane type central venous catheter can be inserted and dressed down over the clavicle. This technique allows positioning for optimal performance and patient comfort, requiring less unscheduled dressing changes and may result in increased patient and clinician satisfaction.

Q5. In the same five patients can you describe the patient comfort of having a low approach IJ catheter dressed over the clavicle instead of up the neck towards the ear and hair?

Q6. Assuming that you dress the catheter by turning slightly and placing over the clavicle, Please rate the following questions.

Q7. What type of securement device is used on low approach IJ insertions?

References:

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