

CATHETER TIP MISPLACEMENT DURING ULTRASOUND-GUIDED AXILLARY VEIN CENTRAL VENOUS CATHETER: SINGLE-CENTRE RETROSPECTIVE STUDY

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Introduction

- Axillary vein becomes a good alternative site for CVC insertion, other than subclavian approach
- To determine the prevalence of catheter tip misplacement between axillary and subclavian approaches

Methods

- Retrospective, >18 yo, Axillary vs. Subclavian
- The catheter tip position was determined by chest X-ray
- catheter tip position misplacement was determined by those with tip position in the IJV

Discussion

- Misplaced catheters have been reported in almost every possible anatomical position
- Catheter misplacement can occur at the time of insertion or after a period of time due to migration of the tip
- Certain congenital and acquired abnormalities of the venous anatomy predispose to catheter misplacement.

Results

Demographic data

	Axillary (n = 74)	Subclavian (n = 48)
Age, mean, yr	58.2	60.4
Female, No. (%)	44 (59.5)	17 (37.8)
BMI, mean, kg/m ²	23.4	23.0
Right side, No. (%)	49 (66.2)	29 (64.4)

Tip location data

	Axillary (n = 74)	Subclavian (n = 48)	Total
IJV	6 (8.1%)	1 (2.2%)	7 (5.9%)
Central	68 (91.9%)	44 (97.8%)	112 (94.1)
Total	74	45	119

Conclusion

The prevalence of catheter misplacement during ultrasound-guided axillary vein approach was higher than those with subclavian approach