For the nephrologist practicing in resource-limited settings, vascular ultrasound is often unavailable; consequently, blind percutaneous puncture of large veins is often employed to establish vascular access for hemodialysis” Komolafe and Olatise (2016).

Abstract:

BACKGROUND: For the nephrologist practicing in resource-limited settings, vascular ultrasound is often unavailable; consequently, blind percutaneous puncture of large veins is often employed to establish vascular access for hemodialysis.

METHODS: To examine the efficacy and safety of this approach we evaluated 53 consecutive patients in whom central vascular access was required. The vascular access route utilized was primarily the right internal jugular vein. In the majority of cases, the indication for central vascular access was hemodialysis.

RESULTS: The average number of needle passes required to obtain vascular access was 1.6 for the patient population studied. A total of 90.6% of the patients required ≤2 needle passes during cannulation. Complication rate for the blind approach was low (7.6%) and no serious or life-threatening complications occurred.

CONCLUSIONS: Our findings suggest that blind percutaneous puncture of the internal jugular vein by trained hands is a relatively safe and effective approach for establishing vascular access for hemodialysis in resource-limited settings. Nevertheless, wherever vascular ultrasound is available, it should be primarily utilized because of the documented advantages of image-guided insertion. Keeping in view the risk of serious peri-procedural complications which include death, the emphasis on image-guided insertion, is appropriate, particularly, in non-emergent situations.

Reference:


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