

Right Upper Limb Weakness Following Internal Jugular Vein Cannulation

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An 82-year-old female with history of small cell lung cancer was admitted for urosepsis. During hospitalization, septic shock progressed and central venous catheter insertion was needed for fluid resuscitation and preload volume monitoring. Due to her severe kyphoscoliosis, it was difficult to insert the central venous line. After attempts at inserting catheter via right internal jugular vein for several times, the patient's neck became swelling. For prevention of further trauma, catheterization was discontinued. Three days later, the patient developed right upper limb weakness. Emergent head and neck computed tomography showed right side subclavian artery pseudoaneurysm surrounding with huge hematoma, extending from right lower neck to arm (Figure 1). She then underwent operation for pseudoaneurysm immediately.

Puncture related hematoma is a common complication to the central venous catheter insertion. Inadvertent arterial puncture is often without consequence, but can lead to devastating complications, such as airway obstruction, brachial plexus compression, or shock. Pseudoaneurysm formation of right subclavian artery has been reported as the complication of patients undergoing subclavian venous puncture¹. However, it has been never reported in patients undergoing internal jugular venous puncture. For preventing the trauma, ultrasound-guided catheterization could be a better technique to accurately locate the puncture site.

References

- 1 Ramamoorthy R, Wong CF, Murphy M, et al. Iatrogenic pseudo-aneurysm of the subclavian artery and dissection of the aorta, secondary to central venous line insertion: a treatment dilemma! *Nephrol Dial Transplant* 2006; 21:1447-1448