A 33-year old woman with suspected pulmonary embolism, developed a pseudoaneurysm of the neck three days after a CVC placement in the right internal jugular vein, determining compression to adjacent neck structures" Palermo et al (2018).

Abstract:

RATIONALE: Central venous catheter (CVC) placement, particularly in emergency setting, may be associated with significant morbidity and mortality.

PATIENT CONCERNS: A 33-year old woman with suspected pulmonary embolism, developed a pseudoaneurysm of the neck three days after a CVC placement in the right internal jugular vein, determining compression to adjacent neck structures.

DIAGNOSES: Computed tomography angiography and selective angiography demonstrated the presence of the pseudoaneurysm originating from the thyro-cervical trunk.

INTERVENTIONS: The treatment was minimally invasive with endovascular exclusion first, and an open thrombectomy to resolve compressive syndrome two days later.

OUTCOMES: The color Doppler ultrasound confirmed the complete exclusion of the pseudoaneurysm with patency of the thyroid artery. A comprehensive review of literature on the risk factors and management of the unintended artery puncture was included.

LESSONS: A correct technique under ultrasound guidance may reduce the incidence of unintended arterial injury during CVC placement. In patients with suitable anatomy and unfit for open repair, a minimally invasive approach provides a safe alternative to open surgery with excellent results.

Reference:

Palermo, C., Sanfiorenzo, A., Giaquinta, A.T., Virgilo, C., Veroux, M. and Veroux, P. (2018) Mini-invasive treatment of a large pseudoaneurysm of the neck related to central venous catheter placement: A case report. Medicine (Baltimore). 97(29), p.e11262.

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