Abstract:

Introduction: Retrospective observational study to evaluate the technique of cannulation guided by ultrasound of the left internal jugular vein (LIJV) using a lateral oblique axis (LOAX) approach with variable angulation in the placement of tunneled central venous catheters (CVC) for hemodialysis.

Methods: Seventy-one patients with 77 LIJV vascular accesses aged 16 or older who needed CVC for hemodialysis were evaluated. The catheters were inserted, guided by LOAX ultrasound with variable angulation, depending on the angulation of the left brachiocephalic trunk. The success rate, additional instrumentation needs, and number of immediate and late complications were analyzed.

Findings: Central venous catheters placement was possible in all cases and none of the peelable introducers folded. A placement guide was needed in only eight patients, whose brachiocephalic trunk elongation and angulation was 90°. We found no major complications, and only five cases of minor complications (6.5%): four periprocedural and one displacement of the catheter a week after placement.

Discussion: Tunneled CVC percutaneous cannulation in LIJV guided by ultrasound with the LOAX approach with variable angulation provides very good results, allows visualization of the needle and the vascular structures at the same time, and reduces the number of manoeuvres required for placement and complications that might arise.

Reference: