

# Needle guide improves catheterization of subclavian vein

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(HealthDay)—A multi-angle needle guide can improve ultrasound-guided catheterization of the subclavian vein, according to a study published online Aug. 28 in *Anaesthesia*.

Tim Maecken, M.D., from the BG University Hospital Bergmannsheil in Bochum, Germany, and colleagues conducted a randomized study to examine the impact of a multi-angle needle guide for ultrasound-guided, in-plane central venous catheter placement in the subclavian vein. A total of 160 patients were randomized to freehand or needle-guided technique; 159 catheterizations were analyzed.

The researchers found that in 96.9 percent of cases, cannulation of the first examined access site was successful, with no significant between-group difference noted. Three arterial punctures and no other severe injuries were identified. There was no between-group difference in

catheter misplacements. In the needle-guided group there were higher success rates within the first and second attempts ( $P = 0.041$  and  $0.019$ , respectively). The access time was reduced with use of the needle guide (from 30 to 16 seconds;  $P = 0.0001$ ), and needle visibility was increased (from 31.8 to 86.2 percent;  $P$

"A multi-angle needle guide significantly improved aligning the needle and ultrasound plane compared with the freehand technique when cannulating the subclavian vein," the authors write.

**More information:** [Abstract](#)  
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