

The long-axis view for IJV cannulation has similar insertion and procedure timings to the short-axis view. However, the complication rate and number of needle punctures required were less with the long-axis view than with those with the short-axis view” Rath et al (2019).

Abstract:

**OBJECTIVES:** Ultrasound-guided internal jugular vein cannulation is a standard procedure performed in ICUs worldwide. According to the guidelines, the short-axis approach is recommended over the long-axis approach for IJV cannulation. Double-operator cannulation is more convenient for the said procedure. However, the guidelines favor single-operator cannulation due to limited trials. We hypothesized that double-operator long-axis cannulation will be faster and have fewer complications than double-operator short-axis cannulation.

**METHODS:** This was a prospective, randomized trial of patients who needed central venous catheterization in the intensive care unit. The eligible patients were randomized into two groups. In one group, the short-axis view by two operators was used for cannulation, and the long-axis view by 2 operators was used in the other group. The time elapsed from skin puncture to guide-wire insertion.

**RESULTS:** The central venous catheter was placed by ultrasound guidance in all 100 patients. No significant differences were observed in the patient characteristics between the two groups. The mean time of insertion was  $74.2 \pm 110.1$  s with the short-axis approach compared with  $70.3 \pm 97.3$  s with the long-axis approach. The frequency of complications was also significantly lower with the long-axis approach.

**DISCUSSION:** The long-axis view for IJV cannulation has similar insertion and procedure timings to the short-axis view. However, the complication rate and number of needle punctures required were less with the long-axis view than with those with the short-axis view.

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Rath, A., Mishra, S.B., Pati, B., Dhar, S.K., Ipsita, S., Samal, S. and Azim, A. (2019) Short versus long axis ultrasound guided approach for internal jugular vein cannulations: A prospective randomized controlled trial. The American Journal of Emergency Medicine. June 14th. doi: 10.1016/j.ajem.2019.06.010. .