



The use of a dual vector positioning system in this study demonstrated optimal hemodialysis catheter insertion can be done with no X-ray and no increase in mechanical complications”

Ramirez et al (2018).

Abstract:

Acute care hemodialysis catheters have traditionally been validated for use through chest X-ray interpretation. This study was implemented to evaluate if hemodialysis catheters can be placed safely and accurately, utilizing an electrocardiogram plus doppler or dual vector positioning system to validate for use. Over a 24-month period hemodialysis catheters were inserted and validated by utilizing a dual vector positioning system instead of chest X-ray. During the study period, 260 hemodialysis catheters were inserted without chest X-ray and validated for use via the dual vector positioning system. An additional 74 inserted catheters required follow-up chest X-rays because of failure to obtain technological validation. During the study period, no patients had a pneumothorax or hemothorax complication subsequent to catheter placement. The use of a dual vector positioning system in this study demonstrated optimal hemodialysis catheter insertion can be done with no X-ray and no increase in mechanical complications.

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Reference:

Ramirez, C., Miranda, S. and Sager, E. (2018) Hemodialysis Catheter Insertion Without Chest X-Ray: Review of a 24-Month Study. *The Journal of the Association for Vascular Access*. 23(4), p.216–220.

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