Using modern-day techniques, the incidence of mechanical complications during placement of tunneled catheters can be diminished. Hence, routine use of ultrasound guidance for insertion of tunneled dialysis catheters should become the standard of care” Aurshina et al (2019).

Abstract:

OBJECTIVE: While placement of tunneled dialysis catheters for hemodialysis access is considered a routine procedure, it is associated with a small chance of mechanical complications. Because the literature examining these issues is not recent and our impression of the incidence of these postprocedural complications is at variance with the existing literature, we decided to review our experience.

METHODS: Since 1998, our vascular service has placed 1766 tunneled hemodialysis catheters in 1065 patients for hemodialysis access. All catheters were placed with ultrasound guidance for the puncture, with selective use of a micropuncture set for patients with low-volume status. All patients underwent chest radiography at the end of each procedure.

RESULTS: The average age of the patients was 61 ± 21 (standard deviation) years. Among the 1065 patients, 44% were female; 93% of catheters were placed in the right internal jugular vein and 7% in the left internal jugular vein. The prevalence of diabetes and
Reducing placement complications associated with tunneled catheters

hypertension in our population of patients was 52% and 72%, respectively. In this consecutive series, no case of postprocedure hemothorax or pneumothorax was encountered. Two cutdowns had to be performed because of injury to branches of the external carotid artery. Three patients had to have a subsequent revision because of malpositioning of the catheter.

CONCLUSIONS: Using modern-day techniques, the incidence of mechanical complications during placement of tunneled catheters can be diminished. Hence, routine use of ultrasound guidance for insertion of tunneled dialysis catheters should become the standard of care.

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