Our analysis shows that placement of LTCVC by a nephrologist in an OR of a dialysis center is effective, safe, and results in substantial cost savings” Quintiliano and Praxedes (2019).

Abstract:

INTRODUCTION: Invasive procedures performed by trained nephrologists can reduce delays in making a definitive vascular access, complications, number of procedures on the same patient, and costs for the Public Health System.

OBJECTIVE: to demonstrate that a long-term tunneled central venous catheter (LTCVC) implanted by a nephrologist is safe, effective, and associated with excellent results.

METHODS: A retrospective study analyzed 149 consecutively performed temporary-to-long-term tunneled central venous catheter conversions in the operating room (OR) from a dialysis facility from March 2014 to September 2017. The data collected consisted of the total procedures performed, demographic characteristics of the study population, rates of success, aborted procedure, failure, complications, and catheter survival, and costs.

RESULTS: the main causes of end stage renal disease (ESRD) were systemic arterial hypertension and diabetes mellitus, 37.9% each. Patients had a high number of previous arteriovenous fistula (1.72 ± 0.84) and temporary catheter (2.87 ± 1.9) attempts until a definitive vascular access was achieved, while the preferred vascular site was right internal
jugular vein (80%). Success, abortion, and failure rates were 93.3%, 2.7% and 4%, respectively, with only 5.36% of complications (minors). Overall LTCVC survival rates over 1, 3, 6, and 12 months were 93.38, 71.81, 54.36, and 30.2%, respectively, with a mean of 298 ± 280 days (median 198 days). The procedure cost was around 496 dollars. Catheter dysfunction was the main reason for catheter removal (34%).

CONCLUSION: Our analysis shows that placement of LTCVC by a nephrologist in an OR of a dialysis center is effective, safe, and results in substantial cost savings.

You may also be interested in...

- Mediastinal haematoma following central venous catheter insertion
- Ultrasound assisted subclavian central venous catheter insertion
- Simulation-based central venous catheter insertion training

Reference: