

Maintenance of hemodialysis catheters in the intensive care unit

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ABSTRACT

BACKGROUND: Renal failure is a common complication of acute conditions. One in five patients of the ICU develop acute renal failure and 17% of them need the renal replacement therapy. Studies have shown that the use of hemofiltration in the development of acute renal failure improves patient survival. The early start of hemofiltration and the careful maintenance of hemodialysis catheters are associated with better results. Nurses face the complications in caring the hemodialysis catheters, that prolongs treatment and patient care, length of stay and critically ill patients often die from the developed infections.

OBJECTIVE: The aim of the study was to investigate the maintenance of hemodialysis catheters in the intensive care unit: to identify the most common complications and analyze the actions of nurses aimed to reduce the risk of complications.

METHODS: Quantitative research, questionnaire. Statistical analysis of data was performed using IBM SPSS Statistics 20.0 and Excel 2010 programs. Descriptive statistical methods were used, the sample characteristics were calculated: average, percentage.

RESULTS: The data analysis has shown that the most common complications were: bleeding and hematoma, infection, catheter displacement and occlusion. A few percent reported cardiac arrhythmias, air embolism and pneumothorax. None of the nurses faced hemothorax, thrombosis, nerve damage.

CONCLUSIONS: When working with the hemofiltration patients who has the hemodialysis catheters, nurses focus on prevention of infections, completing documentation related to hemofiltration and monitoring the status of the catheter and the patient's condition.

KEYWORDS: hemodialysis catheter, complications, infection.