Peripherally inserted central venous catheter: an alternative for improving the quality of nursing care

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Introduction: Evidence suggests high rates of complications related to the peripheral venous catheter (PVC). Among causes is the administration of irritant/vesicant medicine, with $\text{pH} \leq 5$ or ≥ 9 and osmolarity $\geq 900 \text{ mOsm/L}$ ⁽¹⁻²⁾. These risk factors are indications for using peripherally inserted central venous catheters (PICC)⁽³⁻⁴⁾. However, safely using PICC requires the acquisition of knowledge⁽⁴⁾.

Objective: To analyze the cumulative incidence of complications in Portuguese patients with PICC or PVC after implementing an educational intervention on care with PICC.

Method: A theoretical and practical educational intervention with nurses of a service of medicine of Portugal, on care for patients in the insertion, maintenance and monitoring of the PICC. A cohort pilot study was held during 40 consecutive days, in 2016. Patients included were adults: nine patients with PICC and 36 with PVC. Descriptive statistical analysis was performed.

Results: Complication PICC:

- Obstruction – 22.2%

Complications PVC:

- Accidental removal of the catheter by the patient - 47.2%

- Infiltration - 38.8%

- Fluid leakage on the insertion site - 36.1%

- Obstruction - 27.7%

- Phlebitis – 22.2%

- Pain on the insertion site - 5.5%

Discussion & Conclusion: Permanent education is essential to improve nurses' knowledge of PICC care, and is a strategy to achieve higher levels of qualification and the transformation of practices⁽⁵⁾. PICC showed a lower incidence of complications when compared to the PVC, becoming a favorable alternative to improve the quality of nursing care to patients who have a medical indication for PICC. Ensuring the criteria of selection of a venous catheter is essential in order to reduce complications, improve the results of nursing care and promote the patients' well-being⁽³⁻⁴⁾.

References:

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