

IMPLANTS OF LONG-TERM HEMODIALYSIS CATHETERS (PERMCATHS): EXPERIENCE IN A BRAZILIAN PRIVATE HOSPITAL

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INTRODUCTION: Long-stay catheters are indicated when the peripheral vascular bed does not allow the arteriovenous fistula to be performed, or in the abrupt failure or non-existence of the arteriovenous fistula. Other indications include patients with contraindications to peritoneal dialysis, with limited life expectancy or still due to the patient's wishes.

OBJECTIVE AND METHODS: To evaluate the duration of long-stay catheters in chronic renal patients in the hemodialysis service in a private general hospital. To evaluate the complications that led to catheter failure and to evaluate the influence of some characteristics: gender, age, systemic arterial hypertension or diabetes mellitus. Design: retrospective and observational study with a follow-up of 3 years and based on electronic medical records. Sample: Chronic renal patients with Permcath™ or similar long-term dialysis catheter, performed by interventional radiology, from January 2013 to December 2015 (n=154). Exclusion criteria: acute kidney injury, recovery of impaired renal function, functioning arteriovenous fistula, death (not related to catheter complications), loss continuity in the electronic system (see Fig. 1). Data Analysis: we compared the time between two categories by the Mann Whitney test and the quantitative variables by the Spearman correlation coefficient ($p < 0.05$).

RESULTS: After exclusions, 92 patients were analyzed; 60% of these were males. The mean duration of Permcaths was 196.2 days or 6.54 months (median of 140 days or 4.68 months) ranging from 1 to 967 days. There was no significant difference in catheter survival in relation to age ($p = 0.156$) or to sex ($p = 0.243$); There was no significant difference in the survival of the catheter in relation to hypertension ($p = 0.376$) or diabetes ($p = 0.286$). We found an infection rate of 1.04 infections / 1000 catheters / day. The most common causes of access failure were low flow or obstruction, infection, bleeding, catheter fracture, and inadvertent withdrawal (Fig. 2).

CONCLUSION: The Dialysis Outcomes Quality Initiative created by the US National Kidney Foundation recommends that less than 10% of chronically hemodialysis patients should use catheters for more than 3 months in the absence of mature definitive vascular access. Permcaths presented a mean survival of 6.5 months, which fulfills its role when indicated. There was no significant difference in duration of catheters in relation to gender, age or chronic conditions such as hypertension and diabetes.