To evaluate the dwell time and actual survival rates of peripherally inserted central catheter (PICC) placements after balloon angioplasty in patients with unexpected central venous obstructions” Kim et al (2016).

Abstract:

PURPOSE: To evaluate the dwell time and actual survival rates of peripherally inserted central catheter (PICC) placements after balloon angioplasty in patients with unexpected central venous obstructions.

MATERIALS AND METHODS: Data were obtained on all PICC insertions performed in a tertiary care hospital from August 2008 to December 2013. Thirty-five PICCs attempted after balloon angioplasty in 25 patients (15 male and 10 female patients; mean age, 63 years). Fisher's exact test was used to test for differences in reasons for catheter removal between the groups of patients with stenosis or obstructions. Survival curves for PICC dwell time of all patients, stenosis group, and obstruction group were generated separately using Kaplan-Meier survival analysis and compared with log-rank tests.
RESULTS: There were a total 21 obstructions and 14 stenoses. The overall technical success rate of PICC placement after balloon angioplasty was 94% (33 of 35 procedures). The PICC dwell time was determined for 27 PICCs and ranged from 4 to 165 days (mean, 39.6 days). Among all PICCs, 16 were removed early, resulting in an actual survival rate of 40.7% (11 of 27 PICCs). There were no significant differences in reasons for catheter removal between the stenosis and obstruction groups (p = 0.24). The dwell times for both groups were not significantly different by Kaplan-Meier analysis (p = 0.54).

CONCLUSIONS: PICC placement after balloon angioplasty is a good treatment option for patients with unexpected central venous lesions, and offers high technical success rates. The actual survival rate was relatively lower (40.7%) than that from previous studies.

Reference:


DOI: 10.5301/jva.5000579

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