The aim of this study was to evaluate CVC and catheter related complications in our tertiary pediatric intensive care unit” Tolunay et al (2018).

Abstract:

In catheter-using units as pediatric intensive care, it is important to know the complications that may occur during the insertion and use of central venous catheterization (CVC), and to take appropriate measures in order to reduce the mortality and morbidity of critical patients. The aim of this study was to evaluate CVC and catheter related complications in our tertiary pediatric intensive care unit. For this prospective study, 155 central venous catheters and/or hemodialysis catheters used with 106 patients, between August 2014 and August 2015 were evaluated. Demographic information about patients, catheter insertion procedure and catheter related complications were recorded. Sixty-two (58.5%) male and forty-four (41.5%) female patients were evaluated in this study. The median age was 67.5 months (1-212). The mean dwell time of catheters was 10.54±8 days. Twenty-two (14.2%) catheters were removed from patients because of catheter related complications. The mean dwell time of complicated catheters was 10.6±8.5 days and there was no statistically significant difference between complicated and non-complicated catheters. Catheter related blood stream infections was diagnosed in 5.1% (8/155) patients and these catheters were removed from patients. Including these patients, positive blood culture was found to be at 14.2% (22/155). The mean dwell time of catheters with positive blood culture was 14.25±7.3 days. The mean dwell time of catheters with positive blood culture was statistically significantly longer than
catheters with negative blood culture. In the 3 patients who developed catheter thrombosis, 2 patients were followed up because of infection/sepsis and 1 patient had a neurological disease. Catheter thrombosis developed in 1 femoral vein and 2 internal jugular veins. The development of central venous catheter complications depends on many different factors and it is possible to reduce the complications with precautions taken during replacement and daily use.

Reference:
