The purpose of this study was to investigate the risk factors of Catheter-related infection (CRI) in patients with leukemia and to provide some nursing strategies based on the results" Zhou et al (2017).

Abstract:

BACKGROUND: Peripherally inserted central catheter (PICC) is commonly used in nursing for patients with leukemia. The purpose of this study was to investigate the risk factors of Catheter-related infection (CRI) in patients with leukemia and to provide some nursing strategies based on the results.

METHODS: Clinical data from 140 patients with leukemia between May 2014 and July 2016 in Haiyang People’s Hospital, China were retrospectively analyzed. We employed univariate analysis to explore the relationship of various factors, including leukemia types, puncture times, underlying diseases, Catheter indwelling time, hormones use, chemotherapy use, immune functions and seasons, with the incidence of CRI. Further, multivariate logistic regression analysis was conducted to identify the potential independent risk factors of CRI. Bacterial culture was performed for etiological detection.
RESULTS: Among the 140 patients with leukemia, 25 cases were diagnosed as CRI, with the incidence of 17.9%. Univariate analysis showed that puncture times, underlying diseases, catheter indwelling time, hormones use, chemotherapy use, immune functions and seasons were significantly correlated with the incidence of CRI. Multivariate logistic regression analysis revealed that immune functions, puncture times and seasons were independent risk factors for CRI. Etiological bacterial culture detected 20 strains of bacteria (Staphylococcus aureus: n=10, Klebsiella pneumonia: n=4, Coryne-bacterium: n=2 and other species: n=4) in 25 cases diagnosed with CRI.

CONCLUSION: Based on risk factors of CRI and its etiological distribution, appropriate nursing measures can be taken to reduce the incidence of CRI in patients with leukemia.

Reference:


Thank you to our partners for supporting IVTEAM