



Intravenous literature: Freire, M.P., Pierrotti, L.C., Zerati, A.E., Araújo, P.H.X.N., Motta-Leal-Filho, J.M., Duarte, L.P.G., Ibrahim, K.Y., Souza, A.A.L., Diz, M.P.E., Pereira, J., Hoff, P.M. and Abdala, E. (2013) Infection Related to Implantable Central Venous Access Devices in Cancer Patients: Epidemiology and Risk Factors. Infection Control and Hospital Epidemiology. 24th May. .

Abstract:

Objective: To describe the epidemiology of infections related to the use of implantable central venous access devices (CVADs) in cancer patients and to evaluate measures aimed at reducing the rates of such infections.

Design: Prospective cohort study. Setting. Referral hospital for cancer in São Paulo, Brazil.

Patients: We prospectively evaluated all implantable CVADs employed between January 2009 and December 2011. Inpatients and outpatients were followed until catheter removal, transfer to another facility, or death.

Methods: Outcome measures were bloodstream infection and pocket infection. We also evaluated the effects that the creation of a multidisciplinary team for CVAD care, avoiding in-hospital implantation of CVADs, and limiting CVAD insertion in neutropenic patients have on the rates of such infections.

Results: During the study period, 966 CVADs (mostly venous ports) were implanted in 933 patients, for a combined total of 243,792 catheter-days. We identified 184 episodes of infection: 154 (84%) were bloodstream infections, 21 (11%) were pocket infections, and 9 (5%) were surgical site infections. During the study period, the rate of CVAD-related infection dropped from 2.2 to 0.24 per 1,000 catheter-days (). Multivariate analysis revealed that relevant risk factors for such infection include surgical reintervention, implantation in a neutropenic patient, in-hospital implantation, use of a cuffed catheter, and nonchemotherapy indication for catheter use.

Conclusions: Establishing a multidisciplinary team specifically focused on CVAD care, together with systematic reporting of infections, appears to reduce the rates of infection related to the use of these devices.

