

Effective nursing care in patient care in transplantation of hematopoietic stem cells and their impact on care and reducing Related Infection Index Catheter - Experience report

Introduction: Infections related to the use of central venous catheter (CVC) constitute a very important issue, considering that 90% of bloodstream infections are caused by the use of CVC. Nursing care in the handling and control of infections related to catheter (CRI) is currently a challenge in health care, considering the high rate of morbidity and mortality associated in critically ill patients and hematopoietic stem cell transplantation (HSCT).

Objective: To demonstrate the importance of nurses in direct patient care and integral in optimizing the care and reducing the corporate income tax rate.

Methods: We performed a retrospective evaluation of the prevalence of loss and infection related to CVC from October / 2013 to April / 2014 and October / 2014 to April / 2015 in HSCT service of a specialized hospital in São Paulo. To this end, information was collected on the type, quantity and outcome of catheters inserted in that period.

Results: From October / 2013 to April / 2014, 35 central venous catheters were implanted, of which 11 were type Hickman and 24 of the double lumen type. In this period it was proven two catheter-related infections (*Pseudomonas* and *Acinetobacter*). There were two losses related CVC failure nursing care, one for traction and other for breaking the CVC and two thrombosis and malposition. From October / 2014 to April / 2015, 37 central catheters were implanted, 17 were Hickman type and 20 Double lumen type and during this period there was no infection related to catheter, although two CVC have been withdrawn on suspicion be confirmed. We can attribute this trend to the insertion of nurses in direct and comprehensive care to the patient.

Discussion: The data analysis shows that the full nursing care adds important value to reduce loss and IRC index. In the first period, there was overall loss of 17.14%, and second, was 5.40% of CVC inserted. This improvement is attributed to factors such as the break up of the team, before unified, and the nurse responsible for 12 beds, now reduced to six, making the patient care exclusive and full-HSCT. There was an increase of nursing framework and the nurse was inserted in direct patient care, optimizing the sizing. This direct care enables effective monitoring of the catheter conditions (hyperemia in ostium, flow and road clearing, curative conditions). The nurse also contributed in choosing the best insertion site, allowing adaptation of the dressing fixture; fewer people manipulating the catheter and development of more frequent educational activities with staff and patients, such as incentive campaign to the use of alcohol gel. The long nurse contact with the patient allows to observe the applicability of the guidelines in caring for the catheter and understanding of the patient. While neutropenia, compress the bath with a 2% chlorhexidine was established, avoiding the need greater exposure and manipulation of the catheter during this critical period of treatment.

Conclusion: The IRC and failures in the care are related to the absence of good practice and the hospital nurses in this context, are the protagonist to minimize the existing fragility of education, implementation and supervision of nursing care to reduce infection rates in patients undergoing HSCT.