

## ABSTRACT

**MORETTO, E.A. Lock technique in indwelling long-term central venous catheters in Brazilian hematopoietic stem cell transplantation centers. 2015. 66 p. Dissertation (Master's Program) – University of São Paulo at the Ribeirão Preto College of Nursing, Ribeirão Preto, 2015.**

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Hematopoietic stem cell transplantation is a modality of treatment based on the infusion of hematopoietic stem cells, and for such procedure, the patient needs an indwelling long-term central venous catheter. This catheter is expected to remain *in situ* during treatment, however a frequent complication that leads to its removal is the occurrence of catheter-related infection. The therapy lock technique consists in keeping the catheter unused for some time with its route filled in by some type of solution, and it may be used to prevent and control intravascular catheter-related infection. Nonetheless, this technique is poorly studied and has few results as for its effectiveness. The aim of the present study was to identify the way the therapy lock technique has been used by the nursing staff of Brazilian hematopoietic stem cell transplantation centers registered in the Brazilian Society of Bone Marrow Transplantation. A descriptive cross-sectional study was conducted, and variables were analyzed by means of descriptive statistics. The sample of cases comprised forty six hematopoietic stem cell transplantation centers, which received an on-line questionnaire with eight multiple-choice questions, between June and November 2014. The respondent population was twenty two centers (47.8%), with prevalence of eighteen (82%) centers in the southeast region. The staff of sixteen (73%) centers knew the lock technique and, of these, the staff of thirteen (81%) used it. This technique has been used for over five years in six (43%) centers. Most of the centers used the technique to prevent catheter-related infection and only five (36%) used it for treatment. Regarding catheter-related infection rates, eight (57%) stated they were reduced, however, in the assessment of efficacy in the reduction of catheter-related infection, six (43%) nurses claimed to be partially favorable to the use of the lock technique. Regardless of the type of antibiotic used, six (43%) used antibiotic and heparin, and six (43%) used only vancomycin. Results provide professionals from the hematopoietic stem cell transplantation centers with a general panorama on the use of the therapy lock technique for the services, so they can learn a strategy that can prevent the early removal of the central venous catheter.

Key-words: Hematopoietic Stem Cell Transplantation, Central Venous Catheterization, Medical Oncology, Nursing Care, Antibiotic Prophylaxis.