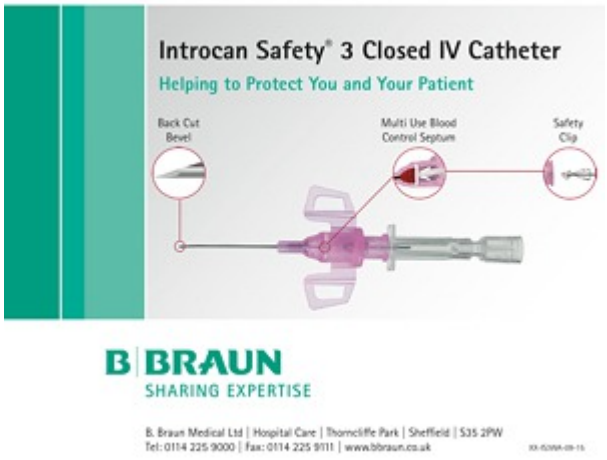

This study aims the improvement of the CVC management, using a double lumen extension line with needleless connectors, in acute leukemia (AL) patients population undergoing high dose chemotherapy treatments" Martinez et al (2018).

Abstract:

Background: With the increase in the number, frequency and duration of treatments, long-term catheters were needed to allow different and continuous administration of intravenous therapy, transfusion support and blood sampling. Since many years, the use of needleless connectors is recommended on central-lines access, being crucial the knowledge of the implications associated with the use of these long terms central venous catheters (CVC).

Purpose: This study aims the improvement of the CVC management, using a double lumen extension line with needleless connectors, in acute leukemia (AL) patients population undergoing high dose chemotherapy treatments.

Methods: A single-centre, prospective comparative study was performed, including all consecutive AL patients using a long-term double lumen silicone CVC (commonly named Hickman® type), with single access (group 1) or double lumen extension with needleless connectors (group 2), undergoing chemotherapy treatment (CT) or aplasia support from December 2014 to December 2016 at the Haematology Department of the Portuguese Institute of Oncology of Porto.

Results: Overall 17 AL patients reporting 78 hospital admissions , 1.122 admission days and 1.044 CVC-days were studied. Considering the central line reports, no signi cant CLABSI risk was determined between study groups [RR 0.4528, 95 % CI, 0.1235-1.6605], however, the central line colonization was always reported in the SSNC group. All positive blood cultures were reported undergoing neutropenia. None CRBSI was identified.

Conclusion: The study suggests that the DSNC can be a good option to the nursing practice that aims the reduction of the central line colonization risk and improves a safety CVC management in AL patients undergoing high dose chemotherapy.

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Martinez, J., Neves, F., Sousa, J., Santiago, D., Rodrigues, D., Mendes, M. and Ramada, D. (2018) Improving a better nurse practice associated with the manipulation of CVC and needleless connectors. ON, 37. November. On-line publication. .

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