The aim of this study was to compare the colonization rates of central venous catheter (CVC) and arterial catheter (ArtC) hubs fitted with two types of needleless connectors (NCs)” Delgado et al (2019).

Abstract:

INTRODUCTION: The aim of this study was to compare the colonization rates of central venous catheter (CVC) and arterial catheter (ArtC) hubs fitted with two types of needleless connectors (NCs).

METHODS: We designed a prospective randomized study to compare rates of catheter hub colonization of CVC and ArtC hubs fitted with two types of needleless connectors: neutral-pressure NCs (NP-NCs) and positive-pressure NCs (PP-NCs) in critically ill patients. All NCs were replaced every 7 days of use.

RESULTS: We obtained 326 cultures from 146 catheters (81 CVC and 65 ArtC) in 70 patients. The total cumulative days of risk were 1250 catheter-days. Global swab cultures were positive in NP-NCs in 29/198 (14.6%) versus 17/128 (13.3%) in PP-NCs during catheter use. We did not observe any cases of CRBSI.

CONCLUSIONS: In our experience, the use of PP-NCs did not result in significantly more frequent hub colonization with respect to NP-NCs.
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