



We have been using needle-free connectors for several years in our intensive care unit and here we present a protocol for installing these connectors on central venous catheters” Clavier et al (2019).

Abstract:

Needle-free connectors were initially designed and promoted to avoid blood exposure for healthcare workers. Some recent data suggest that the latest generation of connectors (with positive displacement) may be of interest for reducing central venous line infections. We have been using needle-free connectors for several years in our intensive care unit and here we present a protocol for installing these connectors on central venous catheters. After insertion of the catheter and control of the permeability of the lines, the connectors must be purged with 0.9% NaCl before being connected. The connectors replace all disposable caps used on infusion stopcocks and manifolds. All the connectors are changed every 7 days as recommended by the manufacturer (except when there is macroscopic contamination, which requires an immediate change of the connector). Before each injection, the connector must be disinfected for at least 3 seconds with 70% isopropyl alcohol. The connectors must not be disconnected (unless changed), as the injection is done through the device. Setting up the connectors slightly increases the total time required to place the catheter and there is no formal evidence that these connectors reduce the incidence of infectious or thrombotic complications. However, these devices simplify the management of central venous lines and prevent the catheter circuit from “opening” once it has been sterilely installed.

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### Reference:

Clavier, T., Franchina, S., Lefevre-Scelles, A., Gouin, P., Besnier, E. and Veber, B. (2019) A Protocol to Set Up Needle-Free Connector with Positive Displacement on Central Venous Catheter in Intensive Care Unit. *Journal of Visualized Experiments*. 13(149). doi: 10.3791/59801.

