
Abstract:

This study determines if there are differences in colony forming units (CFU) of bacteria between five different needleless intravenous connectors. CFUs create environments for bloodstream infections with 1 CFU to begin an infection and 15 to develop infection. Intraluminal pathway protection is a most significant way to eliminate 50% bloodstream infections. Five different connectors were evaluated by independent laboratory in vitro regarding >=15 CFUs, 4 organisms over 4 days. Q-Syte had significantly higher mean number days CFUs >=15 than all other devices, Rymed-5001(®) having the least (p < .0001). Q-Syte and TKO+Clave(®) had significantly more CFUs >=15 on one or more days. Nonantimicrobial connectors differ on CFU counts in vitro. CFUs are ranked highest to lowest CFUs as follows: Q-Syte, TKOClave( Â®), MicroCLAVE(Â®), MaxPlus(Â®) Clear, and Rymed-5001(Â®). Best nonantimicrobial connector products for intraluminal protection are Rymed-5001(Â®) followed by MaxPlus( Â®) Clear. Using the best connector can significantly prevent infections as part of nursing care.