EFFECTS OF PREOPERATIVE CHLORHEXIDINE BATHS/SHOWER IN REDUCING CENTRAL LINE-ASSOCIATED BLOODSTREAM INFECTIONS IN SURGICAL INTENSIVE CARE UNITS

Ning-Chi Wang a,b, Li-Ping Kan a,b, Jung-Chung Lin a,b, Sheng-Kang Chiu a,b, Te-Yu Lin a,b, Ya-Sung Yang a,b, Yung-Chih Wang a,b, Feng-Yee Chang a,b, a Division of Infectious Diseases and Tropical Medicine, Department of Internal Medicine, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan; bInfection Control Office, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan

Purpose: We evaluated the impact of preoperative baths/shower with 4% chlorhexidine detergent solution versus no bath for reducing central line-associated bloodstream infections (CLABSI) rates in neurosurgical patients in intensive care unit.

Methods: We collected central venous catheter using rates and CLABSI rates in neurosurgical (NS) patients in intensive care unit (ICU) from 2009 to 2011. Whole-body preoperative bathing with 4% chlorhexidine detergent solution was performed one night before central nervous system surgery or just before surgery procedures in emergent surgery patients. The whole-body preoperative chlorhexidine baths/shower was introduced to NS ICU patients since 2010.

Results: The central venous catheter using rates were 48%, 38%, and 36% in 2009, 2010, and 2011 respectively. The CLBSI infection intensity was 4.81/100 in 2009, 1.38/100 in 2010, and 0.18/100 in 2011 in patients of NSICU. Preoperative chlorhexidine bathing did reduce incidence of CLBSI when compared to no bath (p<0.009).

Conclusions: Benefit of preoperative whole-body chlorhexidine bathing for prevention of CLBSI in neurosurgical patients. However, better designed trials with a specific duration and frequency of exposure to chlorhexidine are needed to determine whether preoperative whole-body chlorhexidine bathing effect in reduces CLBSI.

THE PROCESS IMPROVEMENT OF THE SUPPLIES DISTRIBUTION OF THE CENTRAL STERILE SERVICES DEPARTMENT

Che-yi Hung a, Shing-shiu Lin b, a Infection Control, Kuang Tien General Hospital, Taiwan; b Central Sterile Services Department, Kuang Tien General Hospital, Taiwan

Purpose: The delivery of sterile products for use in patient use, however, depends not only on the efficacy of the sterilization process itself but also on a well-designed facility, good infection control practices, effective quality control, and other aspects of device processing and handling before, during, and after sterilization. In 2011, after receiving the hospital accreditation, the accreditation officers suggested that the central sterile services personnel deliver sterile supplies and pick up dirty ones at different time. Therefore, we hoped to apply the process improvement in the supplies distribution of the central sterile services department.

Methods: Between December 2012 and June 2013 we used the quality control process (QC story) to start the process improvement of the supplies distribution of the central sterile services department in our hospital.

Results: We identified and verified root causes of current failure were that traffic control process was not optimized, and the others were written policies and procedures were not available for distribution, rotation, and labeling of sterile packs. To meet the target, we selected two solutions: appropriate traffic control and available policies and procedures of distribution.

Conclusions: Apply process improvement (PI) in supplies distribution can help the central sterile services department optimize its underlying processes to achieve more efficient results.

THE SENSITIVITY QUALIFICATION STUDY OF RAPID READOUT BIOLOGICAL INDICATORS

Jung-Fen Lee a,b, Jr-huei Liu a,b, Ying-Ying Sand, a Central Service Room, Taipei Veteran General Hospital, Taipei, Taiwan; bNursing Department, Taipei Veteran General Hospital, Taipei, Taiwan

Purpose: Rapid Readout Biological Indicators (RRBI) is a biological indicator which could have final negative result at 3 hours by detect fluorescent in an automatically reader. It helps the central service room to release the pack in a short period, and alarm the sterilization failure as soon as possible. But the verification of fluorescent result was scrutinized in Taiwan due to rumor from the commercial market. In order to qualify the 3 hours claim of this RRBI, we documented our daily practices as an evidence to answer this question.

Methods: We processed the RRBI by 134 °C, 5 minutes in our dynamic-air-removal steam sterilizers for every load with the surgical instrument sets. We never meet sterilization fail in past years. The RRBI used was documented with 3 hours fluorescent negative and its 24 hours visual negative result. We also sent 1 RRBI to the hospital laboratory monthly for a 14 day-subculture after it was documented the 3 and 24 hours negative results, in order to qualify the rapid readout results.

Result: The 3 hours fluorescent negative result is 100% in line with the 24 hours visual negative result.

CURRENT STATUS OF HAND HYGIENE PRACTICE IN THE HOSPITALS IN KOREA: USING WHO HAND HYGIENE SELF-ASSESSMENT FRAMEWORK

Myounghun Shin, Hong Bin Kim, Sungran Kim, Kyungwon Lee. Seoul National University Bundang Hospital Infection Control Services, Seoul National University Bundang Hospital, Department of Internal Medicine, Korea University Guro Hospital Infection Control Services, Severance Hospital Department of Laboratory Medicine

Background: Many intervention programs have been developed and implemented into healthcare system to improve hand hygiene (HH) because HH is the most effective way to prevent healthcare-associated infections. In order to evaluate the current status of HH practice in Korea, we conducted a survey using WHO HH self-assessment framework 2010 which is a systematic tool to identify key issues as well as to facilitate development of an action plan for HH promotion program within an individual healthcare facility.

Methods: All 35 healthcare facilities which voluntarily participated in HH improvement program organized by Korean Society for Nosocomial Infection Control (KOSNIC) replied to the survey conducted in January 2014. The framework was modified and translated in Korean.