

POSTER PRESENTATION

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P003: Current status of infection control practice for prevent of central venous catheter-associated bloodstream infection in Korea

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Introduction

There are evidence-based guidelines for the prevention of central line-associated bloodstream infections (CLA-BSI), but the current status of these practices in intensive care units (ICU) of Korea is unknown.

Objectives

To evaluate the current status of infection control practice for CLA-BSI in ICUs of Korea.

Methods

We conducted a cross-sectional survey in ICUs of the KOrean Study group for Infection Control and prevention (KOSIC) at April 2012.

Results

Thirty-five ICUs of 15 hospitals were enrolled in this study. Fourteen of the 35 ICUs (40%) were medical ICUs, 4 (11%) were surgical ICUs, 9 (26%) were neurosurgical ICUs, and 8 (23%) were combined medical and surgical ICUs. The median bed size was 15 beds (interquartile range [IQR], 14-20), and median patient-to-nurse ratio was 1.5 (IQR, 1.3-1.9). During the survey period, the incident rate of CLA-BSI was 3.33 per 1,000 catheter-days (medical ICUs, 5.12; surgical & neurosurgical ICUs, 1.91; combined ICUs, 2.25).

All ICUs had documented guidelines for the prevention of CLA-BSI and conducted surveillance for CLA-BSI. Nineteen (54%) ICUs provided regular education programs for CLA-BSI prevention and 15 (43%) ICUs accessed the adherence to guidelines using a central line

insertion checklist. Twenty-nine (83%) ICUs used a sterile full body drape during an insertion practice and 3 (8%) ICUs used chlorhexidine preparation with alcohol for an insertion skin preparation. Twenty (57%) ICUs used antimicrobial-impregnated coated central venous catheter.

All ICUs conducted hand hygiene promotion program including adherence monitoring and 23 (66%) ICUs conducted active surveillance for multidrug resistant organisms. Hand hygiene adherence was significantly associated with the patient to nurse ratio in ICU ($\gamma = 0.648$, $P < 0.001$).

Conclusion

This study demonstrates that although ICUs in Korea had documented guideline and surveillance system for CLS-BSI, infection control practice in real clinic did not meet the recommended practice standard.

Disclosure of interest

None declared.

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