

POSTER PRESENTATION

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Healthcare associated bloodstream infections – secular trends of 8 years hospital-wide surveillance in a tertiary care university hospital

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Introduction / objectives

Healthcare-associated bloodstream infection (BSI) is the 4th major infection complication in medical care. BSI-surveillance is thought to be useful in monitoring trends of healthcare-associated infections (HAI) including outbreaks, emerging multiresistant pathogens, and effects of HAI intervention programmes.

Methods

Introduced 1995 in acute care, prospective and systematic BSI surveillance at the University of Geneva hospitals was extended to a hospital-wide survey in 2003. Positive blood culture results identified by an electronic automated alert system were individually investigated and allocated to the following categories: contamination, secondary BSI (sBSI), primary BSI (pBSI) and catheter-related BSI (CRBSI).

Results

A non-significant trend was detected for BSI to increase between 2003 (0.15 BSI/1000 patient-days) and 2009 (0.28/1000 patient-days) (IRR 1.09; 95%CI 0.73-1.62; $p=0.67$). This was predominantly due to rising rates of pBSI from 0.24/1000 patient-days in 2003 to 0.47/1000 patient-days in 2009 (IRR 1.05, 95%CI 0.62-1.77; $p=0.85$). No change was detected for sBSI and contaminations while CRBSI episodes increased between 2006 (0.17/1000 patient-days) and 2007 (0.27/1000 patient-days). All BSI-outcomes decreased in 2010 following a hospital-wide training in catheter care. No major outbreak was detected.

Conclusion

Eight years BSI-surveillance did not show significant variation making this mode of surveillance less likely to be affected by confounding factors. Whether improved catheter care contributed to the reduced BSI-rates in 2010 needs to be confirmed.

Disclosure of interest

None declared.

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