



This study aimed to illustrate how the use of different CRBSI definitions affects the reported incidence” Tribler et al (2017).

Abstract:

BACKGROUND: A common complication in patients receiving home parenteral nutrition (HPN) is catheter-related bloodstream infections (CRBSIs). The CRBSI incidence has been advocated as an outcome parameter assessing the quality of care. This study aimed to illustrate how the use of different CRBSI definitions affects the reported incidence.

MATERIALS AND METHODS: In an observational study based on the Copenhagen intestinal failure database, all clinically reported CRBSIs from 2002-2013 were compared with data from the affiliated microbiological database according to recommended CRBSI criteria.

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RESULTS: Clinically, 1034 CRBSIs were observed in 548 adults receiving HPN for 1410 catheter-years. Thus, the clinically assessed CRBSI incidence was 1.95/1000 catheter-days. However, based on the microbiological evaluation, only 47% of our episodes fulfilled the Centers for Disease Control and Prevention (CDC) and European Society for Clinical Nutrition (ESPEN) CRBSI criteria. Employing a catheter-salvaging strategy, 40% of the CRBSI diagnoses

were supported by the paired blood culture positivity criteria and only 6% by a positive catheter tip. In 53%, CRBSIs were categorized as a clinical or “probable CRBSI” diagnosis. In 20% of all episodes, missing information/blood cultures hampered a CDC/ESPEN CRBSI diagnosis. Thereby, according to CDC/ESPEN CRBSI definitions, the incidence was 0.92/1000 days or 46% lower than clinically assessed.

CONCLUSION: This study illustrates the practical and methodological challenges and great variability in reporting of the CRBSI incidence. Nonetheless, it is recommended as a marker of the quality of care. Consensus regarding CRBSI definitions is a prerequisite for a meaningful comparison of this important outcome parameter between HPN centers.

Full Text

Reference:

Tribler, S., Brandt, C.F., Hvistendahl, M., Staun, M., Brøbech, P., Moser, C.E. and Jeppesen, P.B. (2017) Catheter-Related Bloodstream Infections in Adults Receiving Home Parenteral Nutrition. JPEN. January 1st. .

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