One of the factors negatively influencing the incidence is the lack of uniformity in CRBSI definitions, etiology and risk factors for surveillance purposes” Antoňáková Nemčíková and Bednárovská (2017).

Abstract:
BACKGROUND: Catheter-related bloodstream infections (CRBSI) represent a life-threatening complication. They are associated with high morbidity, mortality and healthcare costs. Cancer patients are at particular risk due to the nature of the disease and the therapy-associated immunodeficiency. Although the incidence of catheter-related infections decreased in the past decade, the mortality rate remains high at 12-25%. The incidence of CRBSI differs among patients. While the incidence in ICU patients across the Europe was reported to be 0.5-4.1 episodes per 1.000 catheter-days, the incidence in cancer patients was 1.1-7.5 episodes per 1.000 catheter-days. One of the factors negatively influencing the incidence is the lack of uniformity in CRBSI definitions, etiology and risk factors for surveillance purposes.

PURPOSE: This preview not only presents the definitions of catheter-related infections and etiology and risk factors for developing CRBSI, it also also summarizes epidemiologic data, diagnostic techniques, and the prevention and treatment strategies for CRBSI according to knowledge acquired over the last 10 years. Following the implementation of the prevention strategies guidelines for CRBSI published in 2011 by Center for Disease Control and Prevention and Healthcare Infection Control Practices Advisory Committee, the incidence of CRBSI has decreased by more than 50%. As central venous catheters are a common part of cancer treatment, every oncologist should be aware of the risk of catheter-related infections. The prevention and treatment guidelines with surveillance of CRBSI should be the gold standard in the care of cancer patients as well.

CONCLUSION: Adherence to evidence-based guidelines for prevention of catheter-related infections and surveillance of CRBSI are the basic steps required to reduce the rate of CRBSI. Implementation of these strategies in hospital healthcare policy, particularly in written form, and control of adherence and reporting of the incidence rate to higher authorities are strongly recommended. When these interventions were successfully implemented, they reduced the incidence rate under 1 episode of CRBSI per 1.000 catheter-days in Western countries. Each healthcare facility using central venous catheters should be advised to
Authors recommend uniformity in CRBSI definitions and risk factors for surveillance purposes.

implement these strategies, particular when treating cancer patients. Key words: central venous catheter – catheter-related infections – cancer – epidemiology – etiology – guidelines – prevention and control – therapy. The authors declare they have no potential conflicts of interest concerning drugs, products, or services used in the study.

Reference:

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