Abstract:

Introduction: Central line-associated bloodstream infections (CLABSI) are a frequent cause of healthcare-associated infections, increasing healthcare costs and decreasing the quality of life for critically and chronic ill patients such as those with cancer. These infections are largely preventable and have been significantly reduced throughout the United States. However, further reduction of CLABSI requires continued innovation in preventive strategies.

Areas covered: We provide an overview of the recent medical literature on catheter-related infections among cancer patients, discussing epidemiology, risk factors, and pathogenesis of CLABSI with a focus on the newest and current preventive measures. The data discussed here were retrieved mainly from clinical trials, meta-analyses, and systematic reviews published in the English language using a MEDLINE database search from January 01, 1990 until end of December 2019.

Expert opinion: The growing impact of CLABSI on the healthcare setting and mortality and morbidity rates in cancer patients calls for novel technologies for preventing central line-related infections. Advances in antimicrobial lock therapy are not limited to salvage therapy but have also provided a novel and promising prophylactic approach to CLABSI. Also, the use of antimicrobial-coated catheters with chlorhexidine-impregnated dressings, along with the application of insertion and maintenance bundles, are an effective and cost-effective approach for preventing central line-related infections.

Reference: