The objectives of this study were to analyse outcomes in cancer patients with LTCVC-associated infection, identify risks for unfavourable outcomes and determine the impact of MDR bacteria and antibiotic lock therapy (ALT) in managing such infections.” Freire et al (2018).

Abstract:

Objectives: The management of long-term central venous catheters (LTCVCs) infections by multi-drug resistant (MDR) bacteria in cancer patient is a challenger. The objectives of this study were to analyse outcomes in cancer patients with LTCVC-associated infection, identify risks for unfavourable outcomes and determine the impact of MDR bacteria and antibiotic lock therapy (ALT) in managing such infections.

Methods: We evaluated all LTCVC-associated infections treated between January 2009 and December 2016. Infections were reported in accordance with international guidelines for catheter-related infections. The outcome measures were 30-day-mortality, and treatment failure. We analysed risk factors by Cox forward-stepwise regression.

Results: We identified 296 LTCVC-associated infections, 212 (71.6%) were classified as bloodstream infections (BSIs). The most common agent was Staphylococcus aureus46 (21.7%) infections were due to multi-drug resistant (MDR) Gram-negative. ALT was used in 62
(29.2%) patients, with a 75.9% success rate. Risk factors identified for failure of the initial treatment were having a high Sequential Organ Failure Assessment (SOFA) score at diagnosis of infection and being in palliative care; introduction of ALT at the start of treatment was identified as a protective factor. Risk factors identified for 30-day-mortality after LTCVC-associated infection were a high SOFA score at diagnosis, infection with MDR bacteria, and palliative care; introduction of ALT at the start of treatment, haematological malignancies, and adherence to an institutional protocol for the management of LTCVC-associated infection were identified as protective factors.

Conclusions: Despite the high incidence of infection with MDR bacteria, ALT improves the outcome of LTCVC-associated infection in cancer patients.

Reference: