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**Central line-associated bloodstream infection in cancer patients: MBI-LCBI x non-MBI-LCBI**

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**Background:** Central line-associated bloodstream infection (CLABSI) is the most prevalent healthcare associated infection (HAI) amongst oncology patients. In 2013, the Centers for Disease Control and Prevention / National Healthcare Safety Network (CDC / NHSN) introduced a new definition of mucosal barrier injury associated with laboratory-confirmed bloodstream infection (MBI-LCBI) in order to avoid misclassification of bloodstream infections caused by the intestinal / oral microbiota in cancer patients. This new definition also allowed a proper comparison between CLABSI rates at cancer and noncancer centers. Objectives: To describe clinical and demographic characteristics of cancer patients with CLABSI and MBI-LCBI events, separately.

**Material/methods:** Retrospective study of CLABSI surveillance from an adult oncology acute care hospital in southern Brazil with 228 beds. The review was conducted from January to December 2015. The MBI-LCBI definition by CDC / NHSN criteria was applied to determine and differentiate MBI-LCBI events from CLABSI rates and to compare clinical characteristics and outcomes.

**Results:** We identified 123 CLABSI events in 2015 (5.2 per 1,000 catheter-day). Of these events, 32 were MBI-LCBI (1.35 per 1,000 catheter-day) and 91- "non-MBI-LBI" cases (3.85 per 1000 catheter-day). Of the total sample, 50.8% (n = 63) males; 53.2% (n = 66) had a solid tumor and 29.8% (n = 37) had neutropenia in the CLABSI window (3 days before or 3 days after the event). *Escherichia coli* and *Klebsiella pneumoniae* (16,2%, n = 20) were the most frequent laboratory confirmed microorganisms. The 123 infections occurred in 100 patients; therefore, 12% had more than one CLABSI episode within a year.

**Conclusions:** Significant decrease in CLABSI rates were observed when MBI-LCBI events were separated from "non-MBI-LCBI". Many "non-MBI-LCBI" events were preventable, for this reason, the actions of permanent education in HAI prevention and control should be expanded. We encourage the performance of a Team of Vascular Accesses to act specifically in order to reduce the CLABSI.