Our goal was to evaluate the microbe species responsible for bacteremia or infections related to central venous catheter (CVC) or fluid collections after liver resection. Kostakis et al. (2018).

**Abstract:**

**BACKGROUND:** Our goal was to evaluate the microbe species responsible for bacteremia or infections related to central venous catheter (CVC) or fluid collections after liver resection.

**PATIENTS AND METHODS:** Data from 112 patients (68 males, 44 females) who underwent liver resection over a period of 63 months were reviewed. Patient and tumor characteristics, intra-operative and post-operative data, and the results from cultures of peripheral blood, CVC tips and drained intra-abdominal or intra-thoracic fluid collections were collected.

**RESULTS:** There were positive blood cultures in 20 patients (17.9%). Coagulase-negative staphylococci (CoNS) and bacteria of enteric flora were the micro-organisms found most frequently and half of the cases had multiple isolated microbe species. The construction of a bilioenteric anastomosis was an independent risk factor for microbe isolation in peripheral blood (odds ratio : 11, p = 0.01). Furthermore, there were positive cultures of the CVC tip in 14 patients (12.5%), with CoNS being the micro-organism found most frequently and most cases had only one isolated microbe species. No specific risk factor for catheter-related infections was detected. In addition, there were positive cultures of drained fluid collections in 19 patients (17%), with bacteria of enteric flora being the micro-organisms found most frequently and the majority of cases had multiple isolated microbe species. The construction of a bilioenteric anastomosis (OR: 23.5, p = 0.002) and the laparoscopic approach (OR: 4.7, p = 0.0496) were independent risk factors for microbe isolation in drained fluid collections. Finally, the presence of positive blood cultures was associated with the presence of positive culture of CVC tips (p = 0.018) and drained fluid collections (p = 0.001).

**CONCLUSIONS:** Post-operative bacteremia, colonization of CVCs, and contamination of fluid collections occur frequently after liver resections and various microbe species may be involved. Patients who undergo hepatectomy and a synchronous construction of a bilioenteric anastomosis are at increased risk of bacteremia development and contamination of fluid collections.

You may also be interested in...
What are the microbe species responsible for CLABSI after liver resection?

Reference: