

Evaluation of Clinical Characteristics and Outcomes of Postoperative Infections in Living Liver Donors

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Abstract

Aim: To analyze developing infections after living donor hepatectomy (LDH) in living liver donors (LLDs). **Methods:** Demographic and clinical characteristics of 1106 LLDs were retrospectively analysed in terms of whether postoperative infection development. Therefore, LLDs were divided into two group: with (n=190) and without (n=916) antimicrobial agent use. **Results:** The median age was 29.5 (min-max: 18-55). A total of 257 (23.2%) infection attacks (min-max: 1-8) was developed in 190 (17.2%) LLDs. The patients with infection that were longer intensive care unit (ICU) and hospital stays, higher hospital admissions, emergency transplantation, invasive procedures for ERCP, PTC biloma and abscess drainage, and the presences of relaparatomies and transcystic catheters. Infection attacks derived from a 58.3% hepatobiliary system, 13.2% urinary system, 6.6% surgical site and 5.8% respiratory system. The most common onset symptoms were fever, abdominal pain, nausea and vomiting. A total of 125 positive results was detected from 77 patients with culture positivity. The most detected microorganisms from the cultures taken are Extended-Spectrum β -lactamases (ESBL) producing *Klebsiella pneumonia* (16.8%) and *Escherichia coli* (16%), Methicillin-Resistant *Staphylococcus aureus* [(MRSA) (9.6%)], Methicillin-susceptible *Staphylococcus aureus* [(MSSA) (9.6%)] and *Pseudomonas aeruginosae* (8.8%), respectively. The average number of ICU hospitalization days was 3 ± 2 (min 1-max 30, IQR:1) and hospitalization days was 14 ± 12 (min 3-max 138, IQR: 8). All infection attacks were successfully treated. No patients died due to infection or another surgical complication. **Conclusion:** Infections commonly observed infected biloma, cholangitis and abscess arising from the biliary system and other nosocomial infections are the feared complications in LLDs. These infections should be managed multidisciplinary without delay and carefully.

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