

P2724 Bacterial and fungal infections after liver transplantation: microbial epidemiology, risk factors for infection and 30-day mortality

Weili Zhang¹, Wentao Wang², Mei Kang¹, Siying Wu¹, Ya Liu¹, Quanfeng Liao¹, Fang Long¹, Yuling Xiao¹, Ma Ying¹, Xie Yi¹

¹ Department of Laboratory Medicine, West China Hospital of Sichuan University, Chengdu, China, ² Department of Liver Surgery, West China Hospital of Sichuan University, Chengdu, China

Background: Infections, especially bacterial and fungal infections, are the leading cause of high mortality after liver transplantation (LT). This study aimed to investigate the pathogenic spectrum, antimicrobial susceptibility, and risk factors for infection and 30-day mortality to improve control of such infections.

Materials/methods: A retrospective cohort study was conducted and data from 433 liver transplant recipients between January 2010 and December 2016 were analyzed.

Results: 290 bacterial and fungal isolates were isolated from 170 infected LT patients. Significant independent risk factors for bacterial and fungal infections were age ≥ 60 years (OR 2.151, 95%CI 1.131–4.089, $p = 0.020$), hospital stay ≥ 24 days (OR 1.877, 95%CI 1.200–2.935, $p = 0.006$) and MELD score ≥ 15 (OR 2.564, 95%CI 1.440–4.564, $p = 0.001$). MELD score ≥ 30 (OR 4.733, 95%CI 1.251–17.903, $p < 0.001$) and septic shock (OR 84.209, 95%CI 9.156–774.480, $p < 0.001$) were independent risk factors for 30-day mortality.

Conclusions: 39.3% recipients had at least one bacterial or fungal infection after LT. Age ≥ 60 years, hospital stay ≥ 24 days and MELD score ≥ 15 were independent risk factors of infection for LT recipients. MELD score ≥ 30 and septic shock were independent risk factors for 30-day mortality.

