A third of bacterial infections in patients with cirrhosis across the world are multi-drug resistant

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A worldwide study initiated to investigate the epidemiology and outcomes of bacterial infections in hospitalized patients with liver cirrhosis has reported a prevalence of multi-drug-resistant (MDR) bacteria of 34% and significant regional differences in the risk of developing a multi-drug-resistant infection. Research teams from 46 centres across the world collaborated in this international study, which was promoted by the International Club of Ascites, the final results of which were presented today at The International Liver Congress 2018 in Paris, France.

Bacterial infections are common in patients with cirrhosis and are one of the most important causes of liver-related complications, progression of liver failure, and mortality in these patients.1 Multi-drug-resistant bacteria have emerged as a significant challenge in many countries,2 and infections caused by these bacteria are associated with a particularly poor prognosis in patients with cirrhosis.

The study presented today in Paris included 1,302 hospitalized patients with cirrhosis and bacterial or fungal infections in North or South America (25%), Asia (32%) and Europe (43%). The most common infections identified were spontaneous bacterial peritonitis (SBP; 27%), urinary tract infection (UTI; 22%), and pneumonia (19%). A total of 740 patients (57%) had at least one positive culture and 959 microorganisms were isolated (58% gram negative, 38% gram positive, 4% fungi).

The global prevalence of MDR bacteria was reported to be 34% (95% CI 31, 37%), with the likelihood of having such an infection being higher in Asia (OR 2.79; p=0.017), particularly India (OR 7.94; p