

## ORIGINAL ARTICLE

**Infectious Complications in Patients with Liver Cirrhosis**

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**Abstract. Introduction:** Liver cirrhosis (LC) represents a major public health problem, with high morbidity and mortality rates. **Materials and methods:** We conducted an observational, descriptive, retrospective study in which we included 198 patients with LC hospitalized in the Clinical Emergency Hospital Bucharest over a period of 2 years. They were divided into two primary groups: group A (83 patients with CH who had an infectious complication) and group B (115 patients with LC who did not have an infectious complication). **Results:** The predominant etiology of LC was excessive alcohol consumption, followed by viral infections, specifically hepatitis C virus and hepatitis B virus. The primary factors that contributed to the development of infectious complications were the presence of ascitic fluid, hypoalbuminemia, and a personal medical history of chronic kidney disease. The main infectious complications identified were bronchopneumonia (39%), urinary tract infections (27%), bacteremia (24%), *Clostridioides difficile* colitis (7%), spontaneous bacterial peritonitis (2%), and pleural empyema (1%). The average hospitalization duration and mortality rate were both twice as long for patients in group A as they were for patients in group B. **Conclusions:** In summary, infectious complications are a significant cause of morbidity and mortality in patients with LC and necessitate multidisciplinary management.

**Keywords:** hepatic cirrhosis; infectious complications; diagnosis; prognosis; mortality rate

## 1. INTRODUCTION

Hepatic cirrhosis (HC) represents a major public health problem, with high morbidity and mortality rates. In 2019, 2.4% of all deaths worldwide were attributable to HC [1,2]. The increasing prevalence of obesity and alcohol consumption, in parallel with advances in the management of hepatitis B virus (HBV) and hepatitis C virus (HCV) infections, have influenced the changing epidemiology of HC [1,2]. Although viral hepatitis remains the leading cause of HC worldwide, non-alcoholic steatohepatitis (NAFLD) and alcohol-related HC are on the

rise in several regions of the world [1,2]. The latest epidemiological data estimate that the number of HC-associated deaths will increase over the next decade [1,2]. Therefore, it is imperative to intensify efforts to facilitate primary prevention, early detection, and treatment of liver disease and improve access to health care [2]. The global burden of HC is increasing. In 2017, there were 520,000 new cases of HC, and in 2019, the condition led to 1.48 million deaths, marking an 8.1% increase [2].

HC patients have a two- to three times higher risk of developing bacterial infections and sepsis than other hospitalized patients [3].