Epidemiology and Clinical Evolution of Liver Cirrhosis in Singapore

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Abstract

Introduction: Liver cirrhosis is a common cause of morbidity and mortality and an important burden on the healthcare system. There is limited literature on liver cirrhosis in Singapore. We aimed to describe the epidemiology and clinical characteristics of cirrhotic patients seen in an ambulatory setting in a tertiary referral centre. Materials and Methods: This is a retrospective observational cohort study of cirrhotic patients attending the ambulatory clinic of Singapore’s largest tertiary hospital over 5 years. Cirrhosis was diagnosed on characteristic radiological features and/or histology. Aetiology of cirrhosis was determined by history, serology, biochemistry and/or histology. Data on decompensation events and death were retrieved from computerised hospital records. Results: The study included 564 patients with median follow-up of 85 months. Mean age was 60.9 ± 12.5 years with 63.8% males. Main aetiologies of cirrhosis were chronic hepatitis B (CHB) (63.3%), alcohol (11.2%), cryptogenic (9%) and chronic hepatitis C (CHC) (6.9%). CHB was the predominant aetiology in Chinese and Malays whereas alcohol was the main aetiology in Indians. CHC cirrhosis was more common in Malays than other races. Majority had compensated cirrhosis with 76.8%/18.3%/5%; Child-Pugh A/B/C respectively. Decompensation events occurred in 155 patients (27.5%) and 106 of them (18.8%) died. Diagnosis of cirrhosis via surveillance ultrasound was associated with improved 10-year survival. Age at diagnosis, portal vein thrombosis, Child-Pugh class and decompensation within 1 year of diagnosis were independent predictors of mortality. Conclusion: CHB is the primary cause of liver cirrhosis in Singapore. The major aetiologies of cirrhosis vary amongst the different ethnic groups. Cirrhotics with advanced age, portal vein thrombosis, poorer liver function and early decompensation have a higher mortality risk.


Key words: Aetiology, Ambulatory, Clinical characteristics, Ethnic group, Mortality

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