

Another Asymptomatic Epidemic?

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In this edition of the MMSG, in the manuscript by Coppini et al, we read about the presence of oesophageal varices in patients with Child-A cirrhosis. In this study group the main cause for cirrhosis was Non-alcoholic steatohepatitis (NASH) (28.9%), closely followed by alcohol at 25.8%.

Alcohol related liver disease can be preventable through education programmes. The significant improvement and introduction of Hepatitis C antiviral agents and vaccination programmes for hepatitis B will eventually result in a reduced prevalence of endstage liver disease secondary to chronic viral hepatitis. Non-alcoholic fatty liver disease (NAFLD) is becoming the most prevalent liver disease in western countries. NAFLD is strongly related to metabolic syndrome and insulin resistance seems to play a crucial role. NAFLD is defined by the presence of liver fat accumulation exceeding 5% of hepatocytes in the absence of significant alcohol intake (20 g per day for men and 10 g per day for women), viral infection, or any other specific aetiology of liver disease.¹

NAFLD encompasses a histological spectrum ranging from simple steatosis to NASH. Various stages of fibrosis can exist, ranging from absent (stage F0) to cirrhosis (stage F4). Simple steatosis can progress to NASH and clinically significant fibrosis and thus progressive liver disease and hepatocellular carcinoma.²

More than 50% of adults in the 27 European Union (EU) countries are considered to be overweight (36.4%) or obese (15.5%). Obesity presents greater health risks than being overweight. The prevalence of obesity varies among these EU countries, from less than 10% in Romania, Switzerland and Italy to over 20% in the United Kingdom, Ireland and Malta. NAFLD also has reached epidemic proportions among populations typically considered at low risk, such as China (15%) and Japan (14%).

In an Italian study, NAFLD prevalence was 26%. In a multi-centre European study it was 30.4% and in a southern European study 33% of patients had a high probability of having the disease.³⁻⁵ A study in Greece revealed evidence of NAFLD in 31% and of NASH in 40% of autopsied cases of ischaemic heart disease or traffic accident death.⁶ Two major European studies reported NAFLD prevalence rates of 42.6-69.5% in patients with type 2 diabetes.⁷⁻⁸

Moving on to mortality, data from the Danish National Registry of Patients revealed NAFLD-associated age-adjusted standardized mortality ratios (SMR) (After adjustment for sex, diabetes and cirrhosis at the baseline) were 2.3 (95% CI 2.1-2.6) for all causes, 19.7 (95% CI 15.3- 25.0) for hepatobiliary disease, and 2.1 (95% CI 1.8-2.5) for cardiovascular disease.⁹

In a cohort of Swedish NAFLD patients, the age, sex, and calendar-period adjusted mortality ratio was 1.69 (95% CI 1.24-2.25) for NAFLD compared to the general population.¹⁰

With regards to the economic burden, a German study demonstrated that the average annual overall health-care costs were significantly higher at baseline and at follow-up measurements for individuals with evidence of NAFLD.¹¹

Based on data from the USA adult liver transplantation databases, since 2004 NASH is the second leading cause for liver transplantation. In the USA, NAFLD and NASH related cirrhosis is anticipated to become the leading cause for chronic liver disease and transplantation within the next 1-2 decades.¹²

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What can we do about it? In the absence of a universal protocol and effective therapy to treat these patients, general lifestyle interventions including dietary changes and increased physical activity remains the main treatment modality for this group of patients.¹³

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