Highlights From the 2018 Liver Meeting: Fatty Liver Disease

November 12, 2018 By Lucinda K. Porter RN

The annual meeting of the American Association for the Study of Liver Diseases (AASLD) began a few days ago. Better known as the Liver Meeting, this year's presentations are noteworthy.

This week I will provide summaries of research that caught my attention. Today I begin with the topic that dominated this year's Liver Meeting: non-alcoholic fatty liver disease (NAFLD).

Note that conference posters are preliminary investigations, and are not conclusive until the data are published in a peer-reviewed journal.

Abstract: # 143 Risk of Cirrhosis and HCC in Patients with Steatosis and Normal Aminotransferases - Yamini Natarajan, et al.

This study on nonalcoholic fatty liver disease (NAFLD) sought to understand the rate of cirrhosis and hepatocellular cancer (HCC) in patients with hepatic steatosis (fatty liver) and normal liver enzymes.

This research was collected retrospectively using national Veterans Health Administration data from 2004 through 2008. Subjects with an ALT test were enrolled, unless they had HBV, HCV or diagnoses related to alcohol. Three groups were identified:

1. Those with steatosis and persistently normal ALT (11,415 subjects),
2. those with steatosis and abnormal ALT (positive control = 42,901 subjects),
3. those with no steatosis nor abnormal enzymes (negative control = 24,645 subjects).

Subjects were followed from the date of the first ALT until 12/31/2015 or diagnoses of HCC, cirrhosis or death.

Results: The two fatty liver groups had a higher proportion of patients with diabetes, hypertension, and elevated cholesterol or fats in the blood. The rates for cirrhosis and HCC in patients with steatosis and normal ALTs were similar to those in the negative control groups and significantly lower than those in the positive control group.

Conclusion: Individuals with hepatic steatosis and normal ALTs appear to have the same risk of liver-related outcomes as those in general population without fatty liver disease.

My Comments: NAFLD affects 20 to 30 percent of the United States population. When diagnosing NAFLD, someone with normal liver enzymes may fly under the radar. However, it appears that there is no increased risk of liver-related outcomes for this group of people.

Abstract: # 179 Prevalence and Long-Term Outcomes of Non-Alcoholic Fatty Liver Disease (NAFLD) Among Lean Individuals without Any Components of Metabolic Syndrome - Pegah Golabi, et al.

This study sought to determine the prevalence and long-term outcomes of NAFLD among lean, metabolically normal people. It was conducted in the United States using National Health and Examination Survey data linked to mortality data. Lean NAFLD was defined as body mass index (BMI) ≤ 25 and normal waist circumference (≤ 90 cm for males and ≤ 80 cm for females).

Results: The prevalence of lean NAFLD was 7.5 percent. The prevalence of lean NAFLD without any metabolic abnormalities (absence of type 2 diabetes, insulin resistance, hypertension or elevated cholesterol or fats in the blood) was 5.6 percent. The prevalence of NAFLD increased to 13.2 percent when both type 2 diabetes and elevated cholesterol or fats in the blood were present. The prevalence of NAFLD increased to 42.3 percent when there was type 2 diabetes, hypertension and elevated cholesterol or fats in the blood.

Conclusion: The prevalence of lean NAFLD without any metabolic abnormalities is about 5.6% in the US general population. These individuals with NAFLD don't seem to have increased risk of death.

My Comments: Albeit low, I was somewhat dismayed by the presence of fatty liver disease in people who are lean, but encouraged by the low mortality risk if there is no evidence of metabolic abnormalities. However, people with metabolic abnormalities who are lean may be at considerable risk.

Abstract: # 273 In Medicare Patients with Hepatocellular Carcinoma (HCC), Non-Alcoholic Fatty Liver Disease (NAFLD) Is Among the Top Causes for Mortality and Resource Utilization - Omer Shahab, et al.

The purpose of this study was to assess recent trends in mortality and liver cancer (hepatocellular carcinoma /HCC) among people using Medicare in the United States. This study used a random sample of Medicare users from 2005 through 2014.

Results: Researchers identified 13,648 cases of HCC. The mean age was 70 years. Nearly 63 percent were male; 76 percent were white. Compared to patients with hepatitis C virus (HCV) alone, the highest mortality risk factors in descending order were:

- HCV with alcoholic liver disease,
- NAFLD.

Conclusion: There are increasing numbers of HCC hospitalizations and death among Medicare

recipients. Coexistence of alcoholic liver disease and HCV and NAFLD were associated with higher mortality and Medicare charges.

My Comments: Liver cancer is the fifth most common type of cancer and the second most common cause of cancer-related deaths worldwide. HCC is one of the cancers that is rising, rather than decreasing in the United States. We need a national campaign to increase education, surveillance, prevention and early treatment to lower the incidence of liver cancer.

Abstract: # 763 The Increase in Mortality Related to Chronic Liver Disease Is Explained By Non-Alcoholic Fatty Liver Disease (NAFLD) - James Paik

The prevalence of obesity and type 2 diabetes are increasing in the United States, along with non-alcoholic fatty liver disease (NAFLD). The objective of this study was to assess the mortality trends of patients with chronic liver disease (CLD) in the United States. Data were collected from the National Vital Statistics System (NVSS) from 2007 through 2016.

Results: There were 714,903 CLD-related deaths registered in the United States. This represents a significant increase. The most common cause of CLD-related death was NAFLD (41%), followed by alcoholic liver disease (32%) and chronic hepatitis C (20%). The presence of type 2 diabetes, cardiovascular disease and renal failure were independently associated with increased risk of death in NAFLD.

Conclusion: Death from chronic liver disease continues to rise in this country, with NAFLD and alcoholic liver disease leading the way.

My Comments: Sigh…

Tomorrow: The latest in hepatitis C treatment, including in young children.
