News Release

Issued: Tuesday 12 April 2016

Liver disease risk increased by type 2 diabetes, study finds

People with type 2 diabetes are at greater risk of serious liver disease than those without the condition, research has shown.

Researchers warn that hospital admissions and deaths caused by liver disease are likely to rise if cases of type 2 diabetes continue to increase at current rates.

The team examined cases of liver diseases among people with diabetes from anonymised, securely linked hospital records and death records in Scotland over a ten year period.

They found that most cases of liver disease in people with type 2 diabetes are not alcohol-related but caused by a build-up of fat within liver cells – a condition known as non-alcoholic fatty liver disease or NAFLD.

NAFLD is commonly linked to obesity, which is also a risk factor for type 2 diabetes. Most people can avoid getting these conditions by following a healthy diet and taking regular exercise.

The research team – led by the Universities of Edinburgh and Southampton – found that men with type 2 diabetes are three times more likely to suffer from NAFLD than men without diabetes.

There are fewer cases of type 2 diabetes and liver disease amongst women but having type 2 diabetes increases the risk of NAFLD by five times, the study found.

People with NAFLD are more susceptible to the effects of alcohol on the liver and should avoid drinking to avoid further complications, the researchers say.

Treatment options for NAFLD – which increases the risk of life-threatening complications such as cirrhosis and liver cancer – are limited.

The study involved researchers from the Scottish and Southampton Diabetes and Liver Disease Group. It is published in the *Journal of Hepatology* and was funded by the Scottish Government through the Scottish Diabetes Group.

Professor Sarah Wild, of the University of Edinburgh's Usher Institute for Population Health Sciences, said: "Preventing non-alcoholic fatty liver disease by avoiding unhealthy lifestyles

in both people with and without diabetes is important because it is difficult to treat the complications of this condition."

Professor Chris Byrne of the University of Southampton and University Hospital Southampton's, NIHR Biomedical Research Centre said: "We have shown for the first time that type 2 diabetes is an important novel risk factor that increases numbers of hospital admissions and deaths, in people with all common chronic liver diseases. Further research is now needed to determine whether all patients with type 2 diabetes should be screened for common chronic liver diseases."

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