

Bigger waistlines raise the risk of serious liver damage in people with type 2 diabetes, study suggests

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New research being presented at the Annual Meeting of the European Association for the Study of Diabetes (EASD), held online this year, found a link between larger waistlines and the progression of non-

alcoholic fatty liver disease (NAFLD) in people with type 2 diabetes (T2D).

Each 1cm increase in [waist circumference](#) was associated with a 5% higher likelihood of developing advanced fibrosis, a late stage of NAFLD.

NAFLD, in which fat builds up in the liver can progress to serious liver damage, including advanced fibrosis—potentially life-threatening scarring of the liver.

It is already known that that up to 15-20% of those with T2D have advanced fibrosis. But little is known about what effect, if any, it has on the complications of diabetes.

Dr. Tiphaine Vidal-Trécan, of Lariboisiere Hospital, Paris, France, and colleagues studied the relationship in 684 T2D patients.

The participants had an average age of 61, a BMI of 28.7 and a waist circumference of 104cm. 59% were male.

Vibration-controlled transient elastography scans (a form of ultrasound) showed that 74.5% had NAFLD. In 12.4% of the participants it had progressed to advanced fibrosis.

24.8% of the participants had macrovascular complications of T2D, such as heart disease. 20.5% had retinopathy (damage to the blood vessels of the retina); 39.4% had neuropathy ([nerve damage](#)); and 38.3% had nephropathy (kidney disease).

Analysis revealed nephropathy to be significantly more common in those with advanced fibrosis than the other T2D patients. 52.1% of those with advanced fibrosis had nephropathy, compared to 36.3% of the other

T2D patients. The study's authors say that more research is needed to confirm this link.

Rates of the other complications (macrovascular, retinopathy and neuropathy) did not differ between those with advanced fibrosis and the other T2D patients. Again, more research is needed to confirm this.

The study also found that every 1cm increase in waistline was associated with a 5% increase in the likelihood of the participants developing advanced fibrosis.

Higher levels of AST, a marker of liver damage, were also associated with higher odds of advanced fibrosis.

Dr. Vidal-Trécan concludes: "Doctors treating people with type 2 diabetes should be aware of these links and check for advanced [fibrosis](#) when their waist circumference or level of AST is high.

"A large waist circumference is linked to [metabolic syndrome](#) and fat accumulation in abdomen, which can lead to NAFLD.

"Weight loss can reduce NAFLD, as can some medication, and the search for new drugs is gathering pace."

Provided by Diabetologia

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