****

**Prevalence of steatotic liver disease, advanced fibrosis and cirrhosis in the USA**

*Yang A, Tincopa M, Tavaglione F et al. Prevalence of steatotic liver disease, advanced fibrosis and cirrhosis among community-dwelling overweight and obese individuals in the USA. Gut 2024; 73: 2045-2053. doi: 10.1136/gutjnl-2024-332917*

Steatotic liver disease (SLD) was re-classified in 2023 into the following sub-categories: metabolic dysfunction-associated SLD (MASLD), metabolic and alcohol-associated liver disease (MetALD) and alcohol-related liver disease (ALD). There is limited prospective data on the prevalence and severity of these subcategories in the overweight and obese population. Yang *et al.,* carried out a cross-sectional study of prospectively recruited patients from the San Diego Liver Study, a large community-based cohort. Inclusion criteria included being 40-75 years old with a BMI (body mass index) ≥25 kg/m². Exclusion criteria included having other causes of chronic liver disease; creatinine >176.8 µmol/L or being unable to undergo MRI. Patients were assessed on a single day with laboratory tests, physical examination, questionnaires and imaging (MRI and Fibroscan). MRI proton density fat fraction (MRI-PDFF) was used for fat quantification and MR elastography (MRE) for fibrosis assessment.

539 patients were enrolled; 75% of them had SLD. Of those with SLD, 67.3% had MASLD, 4.8% MetALD and 2.5% ALD. Overall, 10.8% had fibrosis and 4.5% cirrhosis; these values were consistent between the sub-categories. The mean BMI was 32.6kg/m². The MASLD cohort had higher BMI and more metabolic risk factors. Patients with advanced fibrosis had higher BMI, more metabolic risk factors, lower platelets and bilirubin, and higher ALT (alanine aminotransferase), ALP (alkaline phosphatase) and bilirubin. Interestingly, MRI-PDFF was not significantly different between those with and without advanced fibrosis, whereas Fibroscan CAP (Controlled Attenuation Parameter) values were significantly different.

This is the first study with prospectively collected data using MRI, the most accurate non-invasive measure of liver steatosis and fibrosis.