

Weight-Loss Surgery Improves Survival for People With MASH

People who experienced improvements in MASH or fibrosis after bariatric surgery had lower mortality.

February 26, 2024 By [Sukanya Charuchandra](#)

Bariatric surgery, which involves altering the digestive system to help people lose weight, improved long-term survival in people with [metabolic dysfunction-associated steatohepatitis \(MASH\)](#) who experienced MASH resolution, according to study findings presented at [The Liver Meeting 2023](#).

MASH, [the new name](#) for non-alcoholic steatohepatitis (NASH), and its earlier stage, metabolic dysfunction-associated steatotic liver disease (MASLD), are responsible for a growing proportion of advanced liver disease worldwide. MASLD and MASH are often associated with obesity, diabetes and other metabolic conditions. The buildup of fat in the liver can lead to inflammation, fibrosis, [cirrhosis](#) and even [liver cancer](#). With no effective approved medical therapies, disease management is dependent on lifestyle changes such as weight loss and exercise.

Previous research has shown that bariatric surgery can reduce the risk of [cancer](#) and [cardiovascular disease](#) and lower mortality in people with MASLD or MASH and obesity. Guillaume Lassailly, MD, of CHU de Lille in France, and colleagues conducted a study to assess how bariatric surgery affects long-term survival for people with MASH and severe fibrosis as liver histology changes.

For this analysis, the researchers included 3,028 people who were candidates for bariatric surgery at CHU de Lille between 1994 and 2022. People with MASH underwent liver biopsies at baseline and one year later. At baseline, 2,682 underwent liver biopsy; of these, 232 had biopsy-proven MASH, and 267 had substantial fibrosis (Stage F2 or F3) or cirrhosis (Stage F4). Some 80% of the study cohort experienced an improvement in MASH

after surgery.

At the beginning of the study, people with MASH or substantial fibrosis (Stage F2 or higher) had significantly worse 15-year survival. After bariatric surgery, participants who experienced MASH resolution with stable fibrosis showed biological and histological improvements. MASH resolution without worsening fibrosis is the dual endpoint [often used to evaluate medications](#) for fatty liver

disease.

MASH resolution without worsening fibrosis was associated with improved 15-year survival. Long-term survival among people with MASH resolution was comparable to that of people without MASH at baseline after adjusting for sex, age, body mass index, diabetes, high blood pressure, blood lipid levels and baseline fibrosis.

People who experienced fibrosis regression after one year (falling to Stage F0 or F1) had significantly better survival, although it remained lower than that of people with little or no fibrosis at baseline. On the other hand, if MASH did not resolve or fibrosis worsened, mortality was more than 2.5 times higher, after adjusting for other variables.

“Resolution of MASH without worsening of fibrosis is a predictive factor of long-term survival,” wrote the researchers. “Fibrosis regression was observed mainly after MASH resolution.”

Click here to read the [study abstract](#).

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