GRIPonMASH

What Are MASLD and MASH?

MASLD (Metabolic Dysfunction-Associated Steatotic Liver Disease):
A condition where excess fat accumulates in the liver due to metabolic risk factors like obesity, diabetes, or insulin resistance. It's not caused by alcohol or viral infections.

MASH (Metabolic Dysfunction-Associated Steatohepatitis):
A more severe form of MASLD where fat buildup leads to liver inflammation, damage to liver cells, and scarring (fibrosis), potentially progressing to cirrhosis or liver cancer.

Risk factors

Obesity:
Excess fat can strain the liver, leading to fat buildup and inflammation

Metabolic Syndrome:
Includes a combination of obesity, high blood sugar levels, high cholesterol, and high blood pressure.

Type 2 Diabetes (T2DM):
Poor blood sugar control increases liver fat and damages liver cells.

Unhealthy Lifestyle Choices:
- Diets high in sugar, processed foods, and unhealthy fats.
- Sedentary habits and lack of physical activity.

MASLD affects 25% of adults worldwide, making it one of the most common liver diseases globally.

~20% of MASLD patients develop MASH, which increases the risk of liver failure and liver cancer.

Comorbidities

Cardiovascular Disease (CVD):
Heart attacks and strokes are 1.6x more likely in affected individuals.

Chronic Kidney Disease (CKD):
A 1.45x higher chance of kidney damage.

Liver Cancer (HCC):
MASH is a leading cause of liver cancer in non-drinkers.

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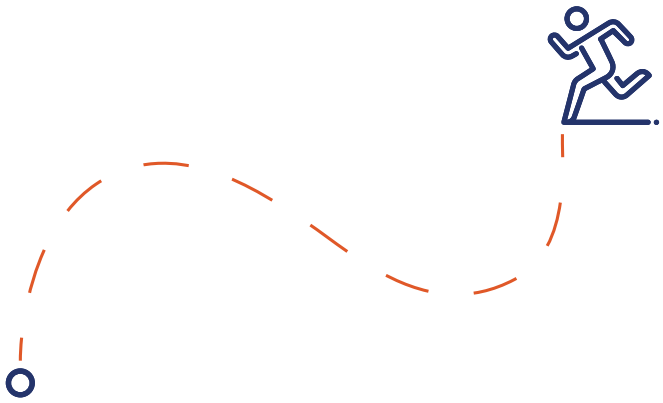
Screening and Diagnosis



MASLD is often silent with no symptoms until late stages. Screening is critical for at-risk groups.

Non-Invasive Tests:

- **FIB4:** Estimates the likelihood of fibrosis using blood tests.
- **NAFLD Fibrosis Score (NFS):** Predicts fibrosis using a combination of clinical and lab data.
- **Imaging:** Techniques like MRI or elastography can assess liver fatand fibrosis.

Who Should Be Screened?

- Individuals with obesity, Type 2 Diabetes Mellitus, or metabolic syndrome.

Management and Treatment

1. Lifestyle Changes:

Weight Loss:
Losing ≥10% of body weight can significantly improve liver inflammation and fibrosis.

Exercise:
Regular activity reduces liver fat and improves insulin sensitivity.

Diet:
Adopting a Mediterranean diet (rich in vegetables, fruits, whole grains, and healthy fats) and reducing sugar and processed food intake.

2. Medical Interventions:

Emerging Drugs:
GLP-1 receptor agonists (e.g., semaglutide), Vitamin E, and PPAR modulators are showing promise.

Current Options (Off-label):
Pioglitazone has shown some benefits for patients with severe fibrosis.

3. Surgical Options:

Bariatric Surgery:
Helps severely obese patients by reducing liver fat, improving inflammation, and reversing fibrosis in some cases.

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For more information go to griponmash.eu

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