

Evidence Discussion – Fatty Liver (Non-Alcoholic Fatty Liver Disease - NAFLD) (AB-29.2)

Fatty liver is often detected incidentally by ultrasound, CT, or MRI performed for other indications. Fat detected in the liver may have many causes including medications, starvation, excessive alcohol intake, other chronic medical illnesses, and metabolic syndrome. Non-Alcoholic Fatty Liver Disease (NAFLD), now known as Metabolic Dysfunction-Associated Steatotic Liver Disease (MASLD), is the most common cause of steatotic (fatty) liver. NALFD (used throughout henceforth) can often lead to serious liver injury (non-alcoholic steatohepatitis: NASH) and complications of cirrhosis. Therefore, monitoring using additional imaging modalities may be indicated, in addition to other non-invasive tests.

For those individuals where fatty liver is incidentally discovered on imaging (US/CT/MRI) or in conditions where NAFLD is suspected, Magnetic Resonance Elastography (MRE) may be indicated.

Other procedures, such as Magnetic Resonance-Protein Density Fat Fraction, MR Spectroscopy, and the multiparametric MRI referred to as Liver Multiscan may be ordered for evaluation of fatty liver disease but their main current utility is in assessing response to therapy in clinical trials and are considered investigational.

Requests for imaging studies to screen individuals at high-risk for NAFLD (e.g., diabetes or obesity) or for screening family members of individuals with NAFLD is not approvable at this time.

References:

AASLD (American Association for the Study of Liver Disease) Practice Guidance on the Clinical Assessment and Management of Nonalcoholic Fatty Liver Disease. Hepatology 77(5): p 1797-1835, May 2023