THREE MYTHS ABOUT FATTY LIVER DISEASE DISPELLED

LiverMultiScan

Naim Alkhouri, M.D.

Naim Alkhouri, M.D., is the VP of Academic Affairs, Chief of Transplant Hepatology, and Director of the Fatty Liver Program at Arizona Liver Health (ALH) in Phoenix, AZ. Dr. Alkhouri has been published in over 160 publications and presents his work at both national and international medical conferences.

Non-alcoholic fatty liver disease (NAFLD) impacts 25% of adults in the U.S., and 3-5% of these patients will progress to non-alcoholic steatohepatitis (NASH), the most aggressive form of the disease. Given the high prevalence of chronic liver disease, and the fact that so many patients progress to later stages without detection, it's incredibly important for specialists like myself to share the most up-to-date information about diagnosis, monitoring, and treatment. I've found that one of the best ways to do this is to address common misperceptions – here are the top three I've encountered in my practice.

Myth #1: All patients with liver disease present the same way

Most patients believe they're only at risk for cirrhosis if they drink excessively. However, it's common for me to see patients who don't drink any alcohol yet have advanced liver disease. These patients have other critical risk factors that simply aren't as well known. For example, the association between liver cirrhosis and Type 2 diabetes is very strong yet extremely under-recognized, even by doctors. Obesity and dyslipidemia (high cholesterol and high triglycerides) represent similar, under-recognized risk factors.

Some providers who don't deal with these conditions in their everyday practice may also have the misperception that there are obvious signs of liver disease—yellow eyes, distended abdomen, or swelling of the legs. But most people with NAFLD and NASH have no symptoms. They may not even present with abnormal liver enzymes. This is what we call a "silent" disease, which makes it harder to detect early, when interventions have more promise. This brings us to the topic of innovations in diagnosis and monitoring.

Myth #2: Diagnosis and monitoring of liver disease are difficult and invasive

Up until recently, none of the non-invasive tools that help us detect this silent disease provided a complete picture—liver enzymes, ultrasound, and MRE each fall short in some way. The current gold standard for diagnosis of NAFLD or NASH is a liver biopsy. While liver biopsy results are accurate, many patients still have concerns about complications, pain, and recovery time.

Perspectum

Recent studies demonstrate Liver*MultiScan*®, a MRI-based diagnostic imaging tool and its cT1 (corrected T1) biomarker provide a clear, accurate tool to diagnosis, stratify, and monitor liver disease. Liver*MultiScan* can quantify fat, iron content and fibro-inflammatory activity in the liver. And it has value beyond diagnosis and disease severity stratification. It provides outcomes useful for determining prognosis as well. Put simply, cT1 allows physicians to find their sick patients where other tests cannot and intervene in time to reverse or prevent their progression to cirrhosis.

Liver*MultiScan*, the technology developed to measure cT1, creates an ideal patient experience as well. Getting a scan takes about 15 minutes and doesn't require any contrast. The resulting visuals are easy to understand. The variation in cT1 values is depicted using an embedded green-red color scale, which corresponds with liver fibro-inflammatory activity (Schaapman, J. J., *et al*. (2021). The scans can be repeated over time, with providers and patients reviewing the images and values together as part of a holistic disease monitoring and management program. Which brings us to our third myth.

Myth #3: There is no treatment for liver disease so early detection doesn't matter

It's true that there's not yet an FDA-approved drug that treats NASH, but promising clinical trials are ongoing, and I believe it won't be too long before we have pharmaceutical therapies for NAFLD and NASH. When the first drugs get approved, however, they are likely to be quite expensive, so the ability to send patients for scans to determine if the treatments are working will be critical to getting insurance coverage.

In the meantime, lifestyle interventions can be very effective. The key is patient engagement. And that's another benefit to Liver*MultiScan*. Ongoing scans give patients the opportunity to literally see the results of their efforts as they watch the cT1 values depicted using an embedded green-red color scale. This is not just my own opinion, it was proven in a recent clinical study of 101 patients with chronic liver disease (McKay, A., *et al*. (2021). Patients reported increased understanding of their liver disease – from 6.28 to 9.22 (on a scale of 1-10) – after undergoing a Liver*MultiScan*. Many participants also explicitly stated that better understanding of their disease could lead to better disease outcomes, reduced stress, and improved patient-physician relationships.

My hope is that these scans become routine for patients who have conditions like Type 2 diabetes that we know put them at even higher risk for NAFLD and NASH.

Perspectum