Highlights From the 2018 Liver Meeting: Liver Transplantation and Cancer

November 15, 2018 By Lucinda K. Porter RN

This week I've been summarizing some noteworthy research presented at the 2018 Liver Meeting. So far, I've covered fatty liver disease, hepatitis C treatment, and hepatitis B. Today let's take a look at liver transplantation and liver cancer (hepatocellular carcinoma/HCC).

Liver Transplantation

Abstract: # 121 Multi-Center Study of Age, Frailty, and Waitlist Mortality in Liver Transplant Candidates - Christine Haugen, et al.

This study examined the relationship between frailty, age, and waitlist mortality. There were 908 liver transplant candidates enrolled from two transplant centers in the United States; 150 (17 percent) were 65 years or older.

Results: Compared to younger candidates, older liver transplant candidates had lower MELDNa scores (an indicator of the degree of liver dysfunction) and were more likely to have NASH (advanced fatty liver disease). Both older age and frailty were associated with significantly higher risk of waitlist mortality.

Conclusion: Older liver transplant candidates had higher rates of frailty than younger candidates. Regardless of age, frailty was associated with a nearly 2-fold increased risk of waitlist mortality. These researchers recommend the development of prehabilitation programs targeting frailty in liver transplant patients, regardless of age.

My Comments: Prehabilitation is a concept I wish all of us practiced. Striving for the healthiest body, mind, and spirit can be an enormous help should we find ourselves wrestling with illness, injury, or aging.

Two other studies explored this issue with similar conclusions:

- Abstract: 124 Home-Based Exercise Therapy in Patients Awaiting Liver Transplantation: A Single-Centre Clinical Trial - Felicity Williams

This small British study reported that patients on the liver transplant waiting list who participated in a home-based exercise program had significant improvements in aerobic and functional capacity.

- Abstract: # 123 Weight Loss Surgery Pre-Liver Transplant Is Superior to Medical Weight Loss in Reducing Post-Transplant Metabolic Complications - Suzanne R. Sharpton, et al.

  This small study conducted in San Francisco found that weight loss surgery prior to liver transplant resulted in sustained weight loss and significantly lower risk of metabolic complications including diabetes, hypertension, and fatty liver disease than medical weight loss did.

Again, the emphasis is on being the fittest one can be prior to liver transplantation. Generally this is true for all surgeries.

Abstract: # 767 Post-Traumatic Stress Disorder (PTSD) in Adult Liver Transplant Recipients: A Pilot Study – Ruhail Kohli, et al.

This pilot study assessed the prevalence and risk factors of the development of post-traumatic stress disorder (PTSD) in 57 adult liver transplant recipients. Median age was 58 years and slightly more than half of the participants were male. Approximately 40 percent of the subjects had a pre-existing diagnosis of depression.

Results: Seven of 57 patients (12 percent) had a positive screen for PTSD. Compared to a primary care population, this prevalence is higher, but comparable to that reported for other solid organ transplant recipients.

Conclusion: Post-liver transplant patients have a higher rate of PTSD than the general population.

My Comments: In my not so humble opinion, I suspect that PTSD is under diagnosed in a variety of circumstances. It doesn't surprise me that liver transplant patients may grapple with this. Note that PTSD is treatable. For symptoms and other information about PTSD, visit the National Institute of Mental Health's website.

Hepatocellular Carcinoma

Abstract: # 274 Differences in Hepatocellular Carcinoma Risk, Predictors and Trends over Time According to Etiology of Cirrhosis: A Cohort of 116,404 Patients with Cirrhosis Including 10,042 Who Developed HCC - George Ioannou, et al.

This study sought to describe the differences in hepatocellular carcinoma (HCC) risks, predictors and trends. Researchers identified 116,404 patients with cirrhosis diagnosed between 2001-2014 in the Veterans Affairs healthcare system. Patients were divided by the cause of cirrhosis:

- Hepatitis C virus (HCV) (n=52,671)
- Alcoholic liver disease (ALD) (n=35,730)
- Non-alcoholic fatty liver disease (NAFLD) (n=17,354)
- Other (n=10,649)

Results: Patients with HCV had more than a 3 times higher incidence of HCC than patients with ALD, NAFLD or other causes. Independent predictors of HCC among all causes of cirrhosis were: age, male sex, Latino ethnicity, high serum alpha fetoprotein, alkaline phosphatase and AST/√ALT ratio and low serum albumin and platelet count. Diabetes was associated with HCC in ALD-cirrhosis and NAFLD-cirrhosis, and body mass index in ALD-cirrhosis.

Conclusion: HCC risk is 3 times greater in cirrhotic patients with HCV than other causes of liver cancer, which strongly suggests that the hepatitis C virus itself may have a direct carcinogenic effect.

My Comments: We know that people with HCV are at increased risk for other types of cancer, and these results aren't surprising. It's interesting to me that hepatitis B is linked to HCC even when there is no cirrhosis, but with HCV, cirrhosis doesn't usually occur unless there is severe liver damage.
