

Obesity Cuts Survival in Liver Transplant Patients

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PHILADELPHIA – Obesity shortens long-term survival in patients undergoing orthotopic liver transplant, according to a review of 285 patients.

One year out from their orthotopic liver transplants, obese transplant recipients (those with a body mass index of 30 kg/m² or greater) had a 75% survival rate, significantly less than the 83% survival rate among nonobese liver transplant patients. The procedures were performed at the University of Maryland in Baltimore during 2000-2008, Dr. Sameh A. Fayeh said at the meeting.

At 2 years and 5 years after transplantation, survival rates among the obese liver recipients were 67% and 54%, respectively – significantly less than the 79% and 63% survival rates in nonobese

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patients, said Dr. Fayeh, a transplant surgeon at the University of Maryland.

“I think [obese] patients don’t do well because their continued metabolic derangement, such as diabetes and hypercholesterolemia, affects their survival, but we don’t have proof of this,” he said. “It is to be determined whether intensive medical therapy, a rehabilitation program, or bariatric surgery post transplant would improve long-term survival.” At the University of Maryland, liver transplants generally are not performed in patients with a body mass index greater than 40 kg/m², Dr. Fayeh added.

Obesity had no impact on short-term survival. At 1 month after transplant, survival rates were 95% among obese recipients and 97% among the nonobese, a difference that was not statistically significant.

During the 9-year period reviewed, 185 nonobese patients and 100 obese patients underwent an orthotopic liver transplant. About a quarter of the patients were at least 60 years old, about a quarter were African American, and slightly more than two-thirds were men. These and other demographic and clinical features were similar in the obese and nonobese subgroups.

Early complications occurred at similar rates in the two subgroups, including the incidence of renal failure, mortality during initial hospitalization, and hospital length of stay. The causes of death throughout the 5-year follow-up were also similar in the two subgroups. The most common causes of death were sepsis, in about 40% of patients, and graft failure, in about a fifth of the patients in both the obese and nonobese subgroups.

In a multivariable analysis, Dr. Fayeh and his associates identified five demographic and clinical features that functioned as independent determinants of mortality: a liver that came from a deceased donor, which boosted the risk for death during follow-up by 2.5-fold; donor age older than 50 years, which boosted the mortality risk 2.4-fold; pa-

tient age older than 65, which raised mortality 2.2-fold; cold ischemia time for the transplanted organ exceeding 12 hours, which boosted the mortality rate by 80%; and recipient obesity, which raised the mortality risk by 60%.

The congress was sponsored by the American Society of Transplant Surgeons. ■

VITALS

Major Finding: Obese patients with a body mass index of 30 kg/m² or greater had a 75% survival rate at 1 year after undergoing orthotopic liver transplant – significantly less than the 83% survival rate among nonobese liver transplant recipients.

Data Source: Review of 285 orthotopic liver transplant patients treated at the University of Maryland, Baltimore, during 2000-2008.

Disclosures: Dr. Fayeh said that he had no disclosures.

IN TYPE 2 DIABETES MELLITUS THERE COULD BE DANGER BELOW

Renal impairment is the leading microvascular complication associated with type 2 diabetes (over 40%), followed by retinopathy (28.5%) and neuropathy (19.4%) – it is important to recognize these complications as soon as possible¹⁻⁴

- ▶ Microalbuminuria (albumin in the urine ≥ 30 mg/day or ≥ 20 μ g/min) is the earliest clinical evidence of renal disease⁵
- ▶ Regular dilated eye examinations can be effective in detecting vision-threatening diabetic retinopathy^{6,7}
- ▶ Because diabetic neuropathy may be asymptomatic in about 50% of patients, it is important to conduct a physical examination of lower extremities and feet annually^{6,8}

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