Researchers have characterized the prevalence and **risk factors** of **fatty liver disease** in patients who undergo **liver transplantation**. The findings, which are published in *Liver Transplantation*, a journal of the American Association for the Study of Liver Diseases, could have important implications for safeguarding transplant recipients' health.

Steatosis—when the liver becomes infiltrated with fat—occurs frequently after liver

transplantation, but little is known about its actual prevalence in transplant recipients, which risk factors are involved, or what effects the condition has on patients' survival. To investigate, Irena Hejlova, MD, of the Institute for Clinical and Experimental Medicine in Prague, and her colleagues retrospectively examined liver biopsies and patient survival data on 548 liver transplant recipients.

Steatosis was found in 309 patients (56.4 percent), including 93 patients (17.0 percent) with significant steatosis. The prevalence increased from 30.3 percent at 1 year to 47.6 percent at 10 years after liver transplantation. When the investigators looked at patients' pre-transplant characteristics, they found that high body mass index and cirrhosis caused by alcohol consumption were linked with an increased risk of developing steatosis. Regarding

patients' post-transplant characteristics, high body mass index, elevated blood triglycerides, alcohol consumption, and type 2 diabetes were linked with steatosis. Post-transplant steatosis was not associated with worse patient survival within several years, but the long-term survival of patients with significant steatosis tended to be worse.

"Our study is the first to describe the occurrence, evolution, and significance of fatty liver in a large unselected population of European liver transplant recipients," said Dr. Hejlova. "Occurrence of fatty liver could indicate those patients whose long-term survival might be impaired. Therefore obesity should be avoided and patients should be encouraged to increase their physical activity. Screening and treatment of diabetes and

hyperlipidemia should also be performed, and naturally, liver transplant recipients should abstain from alcohol consumption.