SUPPLEMENTARY METHODS

Clinical and laboratory evaluation

All blood samples were originally processed into serum and plasma and stored at –80°C. Currently available commercial kits were used for the measurement of plasma levels of the apoptosis-associated neoepitope in the C-terminal domain of cytokeratin-18 (the M30-Apoptosense ELISA kit, PEVIVA, Alexis, Grünwald, Germany), AKR1B10 (Abcam, Cambridge, UK), serum complement factors C3 and C4 (turbidimetric immunoassay Tina-quant C3c and C4, Roche Diagnostics Ltd., Rotkreuz, Switzerland), and the enhanced liver fibrosis test (The ADVIA Centaur Enhanced Liver Fibrosis Test, Siemens Healthcare, Erlangen, Germany). Other clinical indices and scores were calculated as previously described.

FibroScan

FibroScan was performed using the FibroScan 502 (Echosens, Paris, France) by a trained technician blinded to the clinical and histological data. All patients were scanned first using the M probe (3.5 MHz) or, when indicated by equipment, using the XL probe (2.5 MHz) at the right lobe of the liver. At least 10 measurements were made to obtain the median valid liver stiffness measurement in kilopascals (kPa) and the interquartile range (IQR). Liver steatosis values were obtained by controlled attenuation parameter measurement in dB/m. Technical failure was defined as no stiffness measurement obtained or unreliable measurements (defined as a success rate <60% or IQR/median >30%).

Liver tissue sampling and analyses

Bariatric surgery with liver biopsy on segment III or IV of the liver was performed by a surgeon (S.M.K.), while liver biopsy sampling from living liver transplantation donors was performed during liver resection by another surgeon (D.K.). Some liver biopsy results included in the present study were from subjects who underwent percutaneous liver biopsy due to abnormal liver function (S.K.S.). A pathologist who was blinded to the patients' clinical and radiologic results assessed the stained specimens. Histological scoring including the nonalcoholic fatty liver disease activity score was performed using the Nonalcoholic Steatohepatitis Clinical Research Network histologic scoring system. Fibrosis was staged from F0 to F4.