Survival Benefit of Living-Donor Liver Transplant

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Introduction

Liver transplant is a life-saving procedure

Survival benefit has been established for deceased-donor liver transplant (DDLT) for patients with end-stage liver disease at a MELD-Na score of 15 or higher.

Nearly 20% of patients die waiting for liver transplant

In the US, patient with MELD-Na score <15 rarely receive livers from deceased donors

Methods

Case-control study using data for SRTR

Compared Adult between 1/1/12 to 09/02/2021

2,820 living-donor liver transplants (LDLT) vs 116,455 waitlist patients

Results

Living-donor liver transplant (LDLT) recipients gained an additional 13 to 17 life-years compared to waitlist/DDLT

Mortality risk and survival models showed a significant survival benefit for patients receiving an LDLT with a MELD-Na score of 11 or higher (aHR, 0.64, P = .006)

Main outcomes and Measures

Primary outcome

Secondary outcomes

1-year relative mortality and risk, time to equal risk or survival

MELD-Na score at which survival benefit obtained for living donor liver transplant

Key points

An LDLT is associated with a substantial survival benefit to patients with end-stage liver disease with an additional 13-17 life-years, even at MELD-Na scores as low as 11.