

FACTORS INFLUENCING THE WAITING TIME TO LIVER TRANSPLANT IN THE UK AND REPUBLIC OF IRELAND

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Background: Patients accepted for liver transplantation face an uncertain wait and the duration of their wait is dependent on a variety of factors. This study aimed to identify recipient factors that influence a patient's waiting time to a cadaveric routine first liver transplant and to estimate the effect of these factors on a patient's waiting time. **Methods:** Data on 801 adult Group 1 patients listed for a routine first liver transplant in one of the 8 transplant centres in the UK and Republic of Ireland (IRL) during the period 1999 to 2000 were analysed. All UK and IRL patients are registered on the UK National Transplant Database (NTxD) at listing and deaths on the list, removals from the list and transplants are also notified to the NTxD. Patient characteristics that would either be known or easily measured at the time of listing were considered: blood group, gender, primary diagnosis, CMV status, height, weight, body mass index, age, year of registration. A multifactorial Cox regression model was used to identify those characteristics that influenced the waiting time to transplant for adult patients. The model was stratified by transplant centre to allow for inherent differences between centres. The analysis considered transplants as events and censored deaths on or removals from the list prior to transplant. Median waiting times to liver transplant were calculated univariately using Kaplan-Meier estimates. **Results:** The chance of a transplant for adult patients was significantly affected by their weight, blood group and primary diagnosis. The chance increased by 1% for every 1kg increase in weight; patients under 65kg waited a median 95 days compared with those over 85kg who waited 49 days. Patients of blood groups AB and A had around twice the chance of receiving a transplant than group O patients; they waited a median 38, 49 and 70 days, respectively. Patients with cancer had a better chance of receiving a transplant than those with cirrhosis; median waiting times were 31 and 60 days, respectively. For paediatric patients blood group, primary diagnosis and year of registration significantly affected the chance of a transplant. **Conclusion:** Patient characteristics that influenced waiting time to liver transplant were identified. For adult Group 1 patients the lowest median waiting times to a routine cadaveric first liver transplant were associated with heavier patients, blood group A or AB patients and patients with cancer. Whilst lower median waiting times were associated with blood groups AB, A and B patients, those diagnosed with Cholestatic and Metabolic disease and patients registered in the latter years 1999 and 2000.