

The Romanian National Program for Liver Transplantation - 852 Procedures in 815 Patients over 17 Years (2000-2017): A Continuous Evolution to Success

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Abstract

Background: Liver transplantation (LT) has become an established treatment for end-stage liver disease, with more than 20.000 procedures yearly worldwide. The aim of this study was to analyze the results of Romanian National Program of LT.

Methods: Between April 2000 and April 2017, 817 pts received 852 LTs in Romania. Male/female ratio was 487/330, while adult/pediatric ratio was 753/64, with a mean age of 46 years (median 50 yrs; range 7 months – 68 yrs). Main LT indications were HBV cirrhosis (230 pts; 28.2%), HCC (173 pts; 21.2%), and HCV cirrhosis (137 pts; 16.8%). Waiting time and indications for LT, patient and donor demographics, graft features, surgical procedures, and short and long-term outcomes were analyzed.

Results: DDLT was performed in 682 pts (83.9%): whole LT in 662 pts (81%), split LT in 16 pts (2.3%), reduced LT in 2 pts (0.2%), and domino LT in 1 pts (0.1%). LDLT was performed in 135 pts (16.5%): right hemiliver in 93 pts (11.4%), left lateral section in 28 pts (3.4%), left hemiliver in 8 pts (1%), left hemiliver with segment 1 in 4 pts (0.5%), and dual graft LDLT in 2 pts (0.2%). Overall major morbidity rate was 31.4% (268 pts), while perioperative mortality was 7.9% (65 pts). Retransplantation rate was 4.3% (35 pts): 27 whole LTs, 3 reduced LTs, 3 split LTs, and 2 LDLT. Long-term overall 1-, 3-, and 5-year estimated survival rates for patients were 87.9%, 81.5%, and 79.1%, respectively. One-, 3-, and 5-year overall mortality on waiting list also decreased significantly over time from 31.4%, 54.1% and 63.5%, to 4.4%, 13.9% and 23.6%, respectively.

Conclusions: The Romanian National program for liver transplantation addresses all causes of acute and chronic liver failure or liver tumors in adults and children, using all surgical techniques, with good long-term outcome. The program constantly evolved over time, leading to decreased mortality rate on the waiting list.

Key words: liver transplantation, high-volume transplantation center, national experience