LIVER TRANSPLANTATION IN WILSON'S DISEASE

Rotaru Ludmila[1]
[1]Department of Molecular Biology and Human Genetics, *Nicolae Testemitanu* SUMPh, Chisinau, Republic of Moldova.

Background. Wilson's disease is a rare genetic disorder caused by excessive copper accumulation in the body, particularly in the liver and brain. In severe cases, where the disease leads to liver failure, liver transplantation may be required.
Objective. A review of the specialized literature to gain a better understanding of the indications for liver transplantation in Wilson's disease and its impact on patient health outcomes.
Material and Methods. A systematic search of scientific publications was conducted in major databases, including PubMed, Web of Science, and Scopus.
Results. Liver transplantation from a living donor provides superior outcomes, with no reported disease recurrence in these patients. Among patients with neurological manifestations, a 74.2% reduction in symptoms was observed postoperatively. Survival rates at the interval of 1-10 years were reported at 84% and 80%, respectively. While the mortality rate in the first post-transplantation year is 16%, it decreases to 4% in the 1–10-year period. Liver transplantation immediately corrects the copper metabolism defect, with serum ceruloplasmin levels normalizing within the first post-surgery month. The only factor influencing survival rates was reported to be neurological status, with patients presenting severe neurological symptoms having significantly lower survival rates. The high survival rates may be attributed to the relatively young age at the time of transplantation, the low number of comorbidities, and the absence of disease recurrence.
Conclusions. Liver transplantation in Wilson's disease is associated with a high survival rate and a 74.2% improvement in neurological symptoms post-transplant. The 1-, 5-, and 10-year survival rates were comparable, and perioperative care remains the primary determinant of long-term survival.
Keywords: Liver, Transplantation, Wilson's disease.