LUNG TRANSPLANTATION PROGRAMME IN CROATIA

DŽUBUR F.1, 2, Lovrić T.1, Hećimović A.1, Vukić Dugac A.1, 2, Jakopović M.1, 2, Pavliša G.1, 2, Redžepi G.1, Samaržija M.1, 2

1 University Hospital Center Zagreb, Zagreb, Croatia
   Department for Respiratory Diseases Jordanovac

2 University of Zagreb, Zagreb, Croatia
   School of Medicine

Introduction: Lung transplantation is an established therapeutic option for end-stage lung disease in selected patients. During the last 30 years more than 38,000 transplantations have been performed worldwide. Emphysema, pulmonary fibrosis, cystic fibrosis and primary pulmonary hypertension are the most common indications. This type of surgical treatment is increasingly successful, with better early and late survival rates. However, lung transplantation is still hampered by persisting problems such as donor organ shortage, primary graft dysfunction, late graft dysfunction and morbidity related to long-term immunosuppression.

Methods: We collected data from frequent reassessment of transplanted patients and patients in the lung transplant programme in our Clinic.

Results: Lung transplantation programme in Croatia started in the late nineties – first transplantation was performed in AKH 2001. Since then the lung transplant programme has progressively increased its yearly transplant volume; total of 157 patients were enrolled in the programme. Total number of performed lung transplantations, from February 2001 to April 2017, in the AKH Vienna is 53 (male 24 (45.3%), female 29 (54.7%). Since the beginning of our lung transplantation programme, overall patient survival has increased steadily and has been at benchmark levels since the year of 2010. Overall survival rates at 1st and 6th year are 86% and 71%, respectively, which is according to the 33th annual report of the International
Society for Heart and Lung Transplantation (ISHLT) in 2016 above the average result.

Conclusion: The most important factors influencing these results are presumably good teamwork among all involved specialists, improved surgical techniques, and close and long-term patient follow-up by the transplant pulmonologists. This program significantly reduced overall mortality and improved quality of life of these patients. At the same time development of this programme enables the introduction of new diagnostic and therapeutic methods and improves general knowledge in the field of respiratory medicine, especially in the treatment of critically and severely ill patients. The collaboration with AKH potentiates Croatian physicians to get specific education as well as improving scientific collaboration between the two institutions.