

ABSTRACT

Lungs transplantation is a solution for the end stage of pulmonary disease after other therapeutic possibilities that the modern medicine has to offer have been exhausted. The main objective of this thesis is to show postoperative patient care after lung transplantation in the department anesthesiology and resuscitation. A highly specialized complex care and cooperation of various fields is needed. Nurses who take care of these patients must be experienced and skillful. They also need to manage well the nursing care for patients in sedation as well as fully conscious patients. It is also needed that the nurses are acquainted with specialized methods of hemodynamics measurements, administration of nitrous oxide and operation of extracorporeal membrane oxygenation machine. They need to know well the drugs that are being administered. The thesis summarizes anatomy and physiology of respiratory system, it deals with lung disease and their symptoms which most often lead to lung transplantation. Finally, the thesis describes the development of lung transplantation from its beginning to the present including the number of cases of lung transplantation per year. The last chapter of the theoretical part also shows indication, contraindication and the main principles of patient care that is given prior to and after the lung transplantation.

The practical part of the thesis is in the form of case study. The case study deals with a patient with stage 4 chronic obstructive pulmonary disease after double-lung transplantation. It gives information about nursing and medical history, medical prescription and operative report. Furthermore, it gives description of nursing care in the field of consciousness, ventilation, circulation, nutrition, care of invasive line, pain, hygiene, skin, surgical wounds and prevention of pressure ulcers. Finally, there is a description of important physiotherapy and communication.

keywords: Lungs transplantation, cystic fibrosis, chronic obstructive pulmonary disease, postoperative nursing care, ECMO, NO therapy, hemodynamic measurements