Anatomo-functional Alterations of the Respiratory System in the Surgical Approach to Advanced Pneumopathies

PROGRAM

OBJECTIVES:
To discuss the developments in the dealing with patients with terminal pneumopathies, their therapeutic options, including the pros and cons of each one of them. 2. To foster the research and the development of new experimental models that can be used in the investigation and improvement of the surgical treatment of advanced pneumopathies.

BACKGROUND:
Some lung diseases that evolve with significant functional loss, often irrecoverable, such as severe lung emphysema, advanced pulmonary fibrosis and cystic fibrosis are grouped and named under the label of terminal pneumopathies. The terminal pneumopathies are a major cause of death in the world. Besides the high mortality rate, the life quality of the sick people when submitted to clinical treatment is not satisfactory. Therapeutic surgery was not an option for this group of patients until a few years ago in the whole country. Currently, these therapeutic option has shown a significant growth to become a possibility in some city Centers, and its dissemination is of utmost importance. Lung transplant is indicated for patients with pneumopathies in an advanced stage that do not have a satisfactory response to conventional therapeutic clinical treatments. Encouraging progress in this kind of transplant has been experimented though the years, due to developments achieved in the solutions for organ preservation, surgical techniques, intensive postoperative care, control in the treatment of infections and immunosuppressant schemes. However, some factors are still a hindrance to lung transplant success, such as the lack of viable organs, the difficulties in organ preservation, and the development of ischemic injury and reperfusion. Thus, it is important to discuss and analyze the three main factors that can limit the success of this modality of transplant: the care of the donor lung, the care with patients in the waiting list and the care with transplanted patients. Some pulmonary vascular diseases can also develop with progressive functional loss, such as chronic pulmonary thromboembolism, in which situation the pulmonary thromboendarterectomy is the main therapeutic option. Besides, unidirectional
endobronchial valves are among the non-surgical alternatives for the pulmonary volume reduction, with early encouraging results.

**CONTENT (SYLLABUS):**


**BIBLIOGRAPHY:**


5. Medeiros IL, Pêgo-Fernandes PM, Mariani AW, Fernandes FG, do Vale Unterpertinger F, Canzian M, Jatene FB. Histologic and functional evaluation of


