

Introduction

Post-operative pain occurs when intraoperative analgesia stops working, and the source of the superficial tissues are damaged as well as the structure is located deeper. Post-operative pain is a "self-limiting phenomenon" the most intense in the first postoperative days. Therefore, relieving the pain must be one of the institutional objectives and at the same time an integral part of the treatment plan perioperative after thoracic surgery. By reducing the intensity of pain after thoracotomy patients are already mobilized in the process of rehabilitation after surgery, which directly translates into three essential functions mentioned in many publications, or the time of hospitalization, cost and patient satisfaction. To reduce the risk of postoperative pulmonary complications and reduce the consequences of surgical trauma, it is necessary to carefully plan and conduct meticulous perioperative anesthetic.

Aim of the study.

The aim of the study was to evaluate the effects of rehabilitation depending on the used analgesia after surgery cut-lobe. Investigating the relationship between the intensity of postoperative pain and the type of analgesia was assessed by the obtained values of selected spirometric parameters, range of motion in the shoulder complex brachiocephalic, age, sex of respondents, BMI, and mobility of the chest. Examination of postoperative pain based on the measurement of subjective feelings operated using pain scales: verbal scale (VRS - Verbal Rating Scale) and visual-analogue (VAS - Visual Analogue Scale).

Assumptions of the study were defined:

- Method of additional anesthesia, which would allow the use of the benefits of early postoperative rehabilitation in patients thoracic,
- Techniques that increase the possibility to select the most adequate procedure anesthesia in patients undergoing resection of lung lobe, sufficiently low values of postoperative pain sensations affect the satisfactory ventilation of patients.

The study was conducted in the period from 03.10. 2011 to 20.12.2013 year in Sub-Carpathian Physiotherapy Laboratory of Lung Diseases Centre in Rzeszów. Group study covered 100 patients of both sexes who had made anterolateral thoracotomy due to lung cancer in the operational stage. Patients in both groups lobe resection. On examination, gave a positive opinion of the Bioethics Committee of the Medical Faculty of the University of Rzeszów in 2010. Patients were divided into two groups according to the guidelines for the use of additional analgesia subpleural based on indications and contraindications for use of the drug solution with 0.25% bupivacaine. The division into groups:

Group I - patients with general anesthesia and a catheter under pleuritic (0.25% bupivacaine)
Group II - patients with general anesthesia without catheter under pleuritic.

The results obtained after statistical analysis allowed us to then pull the main conclusions:

- In patients after thoracic surgery (lobectomy lobe) additional analgesia subpleural catheter with bupivacaine in repeated doses are more effective than the standard postoperative analgesia.
- The severity of postoperative pain strongly correlates with reduced mobility in the complex range brachiocephalic shoulder on the operated side.
- Results of postoperative rehabilitation were much better in patients in whom anesthesia was used in addition subpleural.
- For the treatment of pain associated with antero-lateral thoracotomy, subpleural anesthesia is a good alternative to the standard anesthesia.
- There has been a significant decrease in spirometric values selected in the first and the third day in a group with standard anesthesia.
- Has been shown to reduced mobility of the thoracic spine in patients with anterolateral thoracotomy in the group with standard anesthesia.
- The mobility of the chest during the respiratory cycle was significantly reduced in the first and third day of patients with a standard anesthesia.