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The Complications, Infections and other Risk Factors after Lung Surgery: The Literature Review

Zulfa Saumia

History Department, Universitas Jambi, Indonesia



Background

According to the P2PTM Ministry of Health of the Republic of Indonesia, lung cancer often occurs in people who smoke. There are two types of cancer, namely small cell lung cancer and non-small cell lung cancer. The cause of lung cancer can occur due to smoking, passive smoking, exposure to certain toxins and heredity.

Symptoms include coughing up blood, chest pain, wheezing, asthma, and weight loss. Various treatments for this cancer range from traditional to lung surgery. Surgery is often the last resort if conventional treatments don't work. Unfortunately, there are various complications that occur after surgery. What and how are these complications?

Methods

The data in this abstract were obtained from reading and analysing various literature research.

Results

Daniel N Nan, Marta Fernandez, et.all, Nosocomial infection after lung surgery: incidence and risk factors, Chest. 2005 Oct;128(4):2647-52

Based on 295 patients with a mean age of 60%, 89% of them underwent surgical resection. The 20 patients developed a severe infection (pneumonia or empyema) with a mortality rate of 60% despite increasing duration. After lung cancer surgery, there are usually risk factors for nosocomial infection. Nosocomial infections are common after lung surgery. One-third of infections are detected after hospital discharge. High-risk profile ranging from pre-existing disease, long operating time and postoperative ICU admission

Bernd M Muehling, et.all, Reduction of postoperative pulmonary complications after lung surgery using a fast track clinical pathway, Eur J Cardiothorac Surg 2008 Jul 34(1): 174-80

The postoperative pulmonary complication rate was 35% in the conservative group and 6.6% in the fast-track group. Postoperatively, there were fewer pulmonary complications in the fast-track group. Morbidity and mortality are not much different. Evaluation of the patient care program needs to be optimized for patients undergoing lung resection. Post-pulmonary care is important to reduce pulmonary complications after major lung surgery.

Marc Licker, Marc de Perrot, et.all, Risk factors for acute lung injury after thoracic surgery for lung cancer, Anesth Analg.2003 Dec;97(6):1558-1565.

Acute lung injury (ALI) can complicate thoracic surgery and is a major cause of postoperative death. Risk factors for ALI include a high index of intraoperative ventilation pressure, excessive fluid infusion, pneumonectomy and inappropriate preoperative alcohol use.

The first postoperative pulmonary complication is Nosocomial Infection . According to Daniel et al, the results of a sample of 295 patients with 60% of them underwent surgical resection. These patients had a severe infection (pneumonia or empyema) and a 60% mortality rate. Second, postoperative pulmonary complications. The rate of postoperative pulmonary complications was less in the fast-track group 6.6%. Morbidity and mortality are not much different. Post-thoracic surgery for lung cancer can cause acute lung injury (ALI) and become the leading cause of postoperative death.

Conclusion

Nosocomial infection occurs because of the long operation time and postoperative ICU admission. Post-pulmonary care is important to reduce complications following major lung surgery. The index of intraoperative ventilation pressure, intravenous fluids, and alcohol use should be considered to avoid death.

Reference

- Daniel N Nan, Marta Fernandez, et.al, Nosocomial infection after lung surgery: incidence and risk factors, Chest. 2005 Oct;128(4):2647-52
- Bernd M Muehling, et.all, Reduction of postoperative pulmonary complications after lung surgery using a fast track clinical pathway, Eur J Cardiothorac Surg 2008 Jul 34(1): 174-80
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