

Comparative study of efficacy of assisted thoracoscopic lobectomy and conventional thoracotomy in treatment of lung cancer

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Abstract: Objective To investigate different clinical results in selection of more optimal surgical approach in lung cancer patients undergoing further surgical treatment. **Methods** From January 2012 to January 2013, 86 cases of lung cancer patients were chosen as research subjects in Cangzhou Central Hospital with surgical treatment. The patients and their families were chosen on a voluntary basis, depending on the study which was divided into surgical methods group and control group as 43 cases. Control group used traditional conventional thoracotomy and lobectomy combined use of assisted thoracic manner by the research team. **Results** The patients underwent successful surgery and no serious surgery syndrome or deaths occurred. The degree of trauma, blood loss, drainage, operation time and postoperative recovery, etc. of study group of patients than the control group, was statistically significant ($p < 0.05$). **Conclusion** Traditional thoracotomy and lobectomy is in the use of adjuvant therapy. Thoracoscopy is safe, and exact and surgery can improve the indicators to further enhance its efficacy.

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Keywords: Lung cancer; conventional thoracotomy lobectomy; thoracoscopy; adjuvant therapy; clinical efficacy

Introduction

Lung cancer has become an annual highest fatality rate of the malignant tumors one of the diseases [1]. For non-end-stage of lung cancer patients, surgical therapy is the most ideal and with good efficacy and optimal treatment modalities. TV-assisted thoracoscopic (VATS) technology is increasingly and more used in clinical of adjuvant therapy [2]. In this study, patients with lung cancer using different surgical clinical results, further select a more optimal surgical approach. Reports are as follows.

1 Data and methods

1.1 General Information January 2012 to January 2013 surgery at our hospital between 1 year to take the 86 cases of surgical treatment of lung cancer patients for the study, all patients were admitted to hospital after clinical and histopathological diagnosis of lung cancer, has carried out lymph node dissection surgical indications. Patients are divided into its pathological types: squamous cell carcinoma in 43 cases, 24 cases of adenocarcinoma, squamous carcinoma 13 cases of glandular merger, other types of cancer, five cases. In the patients and their families a voluntary basis, depending on the surgical methods were divided into study group and control group of 43 cases. Study Group 27 males and 16 females, aged 43-72 years, mean age (56 ± 4.3) years; control group 24 males and 19 females, aged 39-68 years, mean age ($48 \pm$

5.3) years of age. Two groups of patients were excluded prior to surgery and other vital organs suffering from various serious diseases and surgical contraindications, and patients were age, gender, type of cancer and other general data comparison was no significant difference ($p > 0.05$), comparable.

1.2 The control group were treated with traditional conventional thoracotomy lobectomy, which underwent single-chamber and dual-chamber air officer intravenous anesthesia with intubation. Standard thoracotomy procedure, the line of incision anterolateral lobes, lymph node dissection. After conventional surgical treatment, and removal of lymph sent to the laboratory for pathological testing.

Study group patients surgery is joint use of assisted thoracic manner. Its particular: routine preoperative preparation, patients with double-lumen endotracheal intubation and general anesthesia way, then be patient lying supine take health for the contralateral lung ventilation. Section 6-8 in axillary line 1.5cm incision between the ribs as a mirror mouth, and in between the ribs first 4-5 rows according to their difficulty of operation from 6 to 10cm small incisions for the surgical operation mouth. Also can be used in the posterior axillary line 6-7 intercostal line a 2cm incision operation for the auxiliary port. Remaining surgery and cleaning process similar to conventional dissection. Postoperative routine disinfection and cleaning, and

removal of lymph sent to the laboratory for pathological examination.

Detailed records of the surgery patients were integrated indicators, including the degree of surgical trauma patients, blood loss, drainage day of surgery, operation time and postoperative recovery time. For which the composite indicator of the surgery, postoperative clinical efficacy and comparative retrospective analysis of such situations.

1.3 Statistical results of this study data are used Excel database collating all the data and all the statistics on the SPSS19.0 statistical software to be

addressed, and the resulting measurement data are ($x \pm s$) that the differences between the groups were using the t test. And with $p < 0.05$ represented a significant difference.

2 Results

Two groups of patients were operated successfully completed, no serious surgery syndrome and deaths, the study group of patients the degree of trauma, blood loss, drainage, operation time and postoperative recovery, etc. than the control group, the difference between two groups statistically significant ($p < 0.05$), Table 1.

Table 1 of the surgical patients were comprehensive index contrast ($x \pm s$)

group	Number of cases	Degree of trauma (cm)	Operation time (min)	Surgical drainage of the day (ml)	Blood loss (ml)	Postoperative recovery time (d)
Research Group	43	4.±1.3	172±38	153±52	307±55	5.5±1.8
Control group	43	14.2±4.2	198±49	204±62	401±68	9.8±3.2
p		<0.05	<0.05	<0.05	<0.05	<0.05

3. Discussion

Lung cancer is the most common form of clinical cancer, its incidence and mortality in non-small cell lung cancer (NSCLC) is particularly prominent, accounting for 80% of lung cancer [3]. The results of research show that the surgical treatment of patients with lung cancer survival rate is about three years, 40-60%; five year survival rate of approximately 22-45%; while patients in the surgery mortality rate below 3%. Illustrate the use of surgical treatment of lung cancer has just become today one of the most effective treatment [4]. Traditional thoracotomy lobectomy, incision of 30cm, trauma, bleeding more. With the development of minimally invasive surgical techniques, thoracoscopy due with less trauma patients recover quickly, cut beautiful advantages have been widely used in cardiothoracic surgery [5]. VAMT both VATS and thoracotomy traditional advantages of a small incision, do not cut the ribs, without large retractor, avoiding chest wall skin, muscles, nerves overuse injury, reduce postoperative chest deformities. Operating table lamp enters the chest through a small incision assisted thoracoscopic cold light source with good lighting effects, surgical wide field of vision, and illuminate the chest of the dead. Look and television imaging compatible, using traditional materials and mechanical devices and extended closure cutters,

processing hilar vessels, bronchi and lungs crack, hilar and mediastinal lymph node dissection. Operative accurate, reliable, fast, greatly reducing the operative time, anesthesia time, less invasive, supplies the economy, reduce perioperative complications, postoperative patients recover faster, shorter hospital stay.

Study the degree of trauma patients, blood loss, drainage, operation time and postoperative recovery, etc. than the control group, a statistically significant difference between two groups ($p < 0.05$). Description In the traditional conventional thoracotomy lobectomy in the use of adjuvant therapy thoracoscopy precise, safe.

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