

## SURGICAL TREATMENT OF HUGE MALIGNANT MEDIASTINAL TUMOR

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Mediastinal tumor account for 11.8% of a total of various mediastinal tumor, and huge malignant tumor is rare. In this paper, 9 cases with huge tumor, treated surgically in our hospital from November, 1984 to October, 1995.

### CLINICAL DATA

In this series, there were 7 males and 2 females aged from 10 to 52 years with an average of 26.7. The tumors were located in anterior mediastinum in 4 cases, and in posterior mediastinum in 5 cases. The diameters of the mass varied from 16 cm to 20 cm in 4 cases, from 21 cm to 25 cm in 3 cases, of them, the maximal was 26.0 cm the minimal was 8.5 cm.

In pathologically diagnosis, 7 cases were primary cancers, of them, malignant teratoma in 3, malignant fibrous histiocytoma with invading superior and middle lobes of right lung and involving in superior vena cava in 1, fibrosarcoma in 2, malignant thymoma in 1. Of 2 metastatic cancers, one was mucoid liposarcoma, and another was synoviosarcoma. By the pulmonary function test before operation, all patients appeared restrictive or mixed disturbance of ventilation. The hemanalysis and gasometry showed hypoxemia in 5 patients.

### OPERATION

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5 of 9 case used posterior-lateral incision of chest, 3 used mid-sternal incision combined with lateral incision of anterior chest (the affected region), i.e., lateral "T" incision, 1 used neck transverse incision combined with a part of mid-sternal incision and lateral incision of anterior chest, i.e., "L" incision. Simple surgical removal of tumor was accomplished in 6 cases, combined with total pneumonectomy in 2, with resection of upper middle lobe of right lung in 1, with pericardiectomy in 4. Specially, for a young female patients suffered from malignant fibrous histiocytoma with involment of upper-middle lobe of right lung and superior vena cava, using the lateral "T" incision, the huge tumor and the involved right lung and superior vena cava were removed. The artificial vascular transplantations between right cardiac atrium and left innominate vein, superior vena cava within pericardium and right innominate were performed simultaneously in order to reconstructing the blood reflex system.

The complication after operation in the group with the incidence rate of 33% included 1 reexpansion pulmonary edema, 1 cozing of blood of pleurae and 1 pyothorax. None died of operation.

### DISCUSSION

It is important to choose the operative passage of chest for removing huge mass of malignant

mediastinal tumor which invading to unilateral lung tissue. We design the lateral "T" and "L" incision. It can help improve the expose of operative field. The operative injury is smaller than that in bilateral thoracotomy.

Lewis reported that 92-94% of superior vena cava compression syndrome are caused by malignant disease. The vein is involved or compressed seriously. We performed the removal of tumor and reconstructive vascular operation. It is considered that the huge mediastinal carcinoma with superior

vena cava obstruction is not an absolute operative contraindication.

#### REFERENCES

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