

Simultaneous left atrium myxoma extirpation and left-sided pneumonectomy

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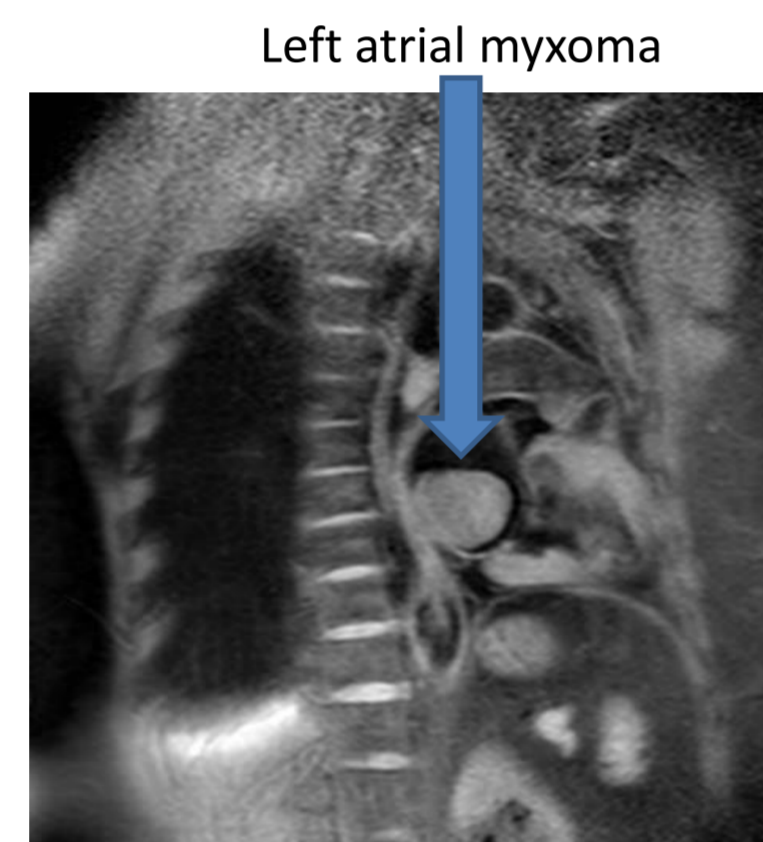
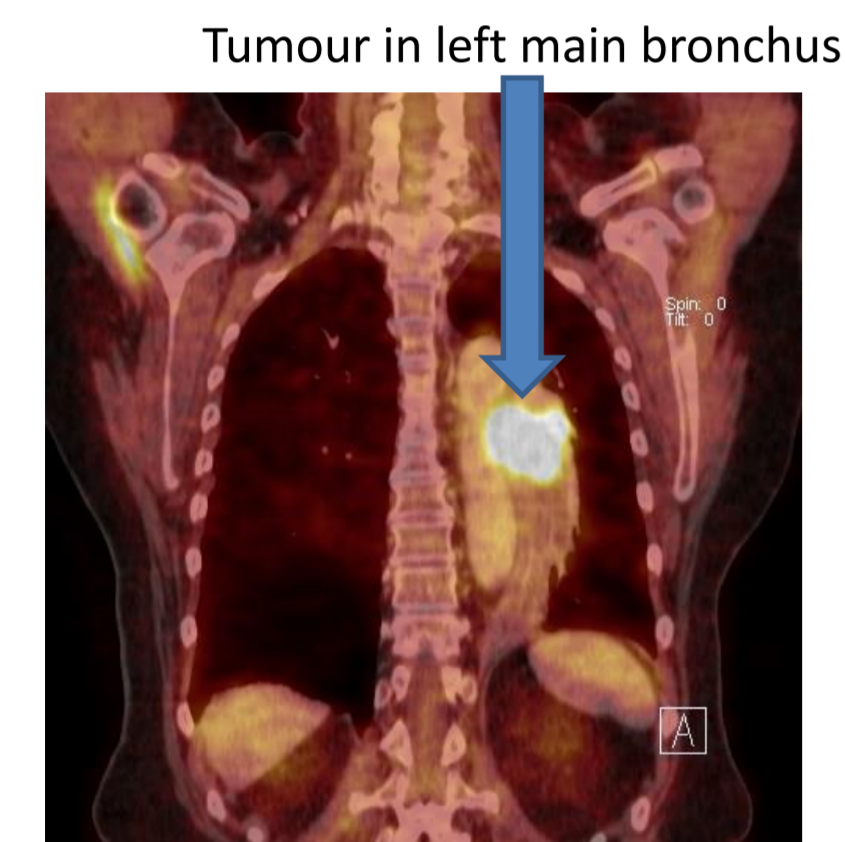
CASE DESCRIPTION

- 60 years old woman with coincidental attendance of two tumours. Bronchogenic carcinoma located in left main bronchus and cardiac myxoma in left atrium.
- Lung cancer of staging T3N1M0 is indication for curative surgery
- Huge myxoma in left atrium is indication for surgery
- The team of surgeons opted for simultaneous cardiac surgery and left sided pneumonectomy

CASE HISTORY

- This patient was investigated for haemoptysis and dyspnea
- The initial chest X-ray showed complete atelectasis of left lung
- CT scan showed huge bronchogenic tumour located in left main bronchus close to tracheal bifurcation
- The first step in patient's therapy was laser reopening of left main bronchus
- Staging assessment made by PET/CT scan showed one metastasis in mediastinal lymphatic node near the tumour.

PREOPERATIVE FINDING



ANAMNESIS

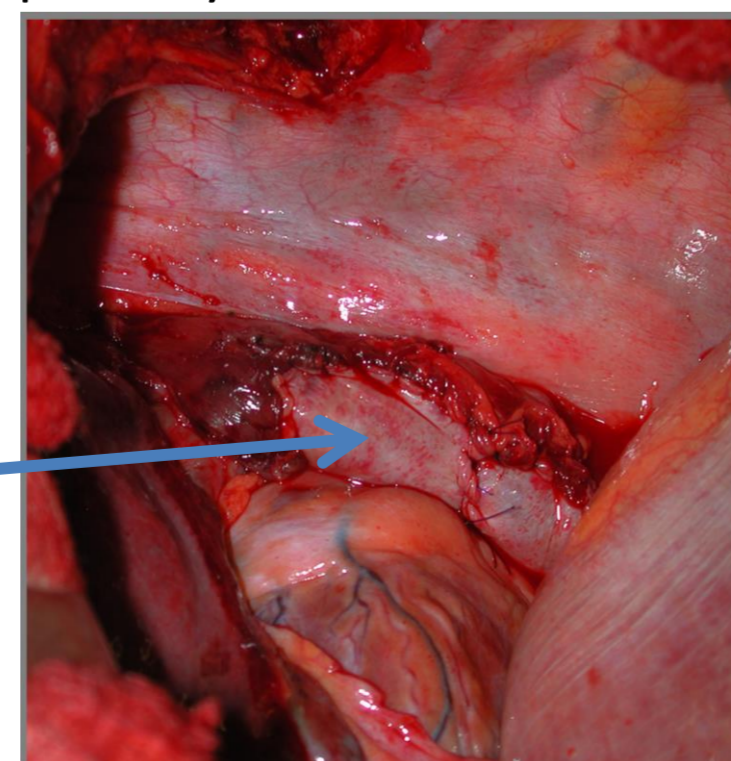
- Paroxysmal atrial fibrillation – rhythm control therapy + anticoagulation
- Arterial hypertension
- COPD 1/A
- Adenoma in right adrenal gland
- Dyslipidemia
- Obesity
- Stp. hysterectomy

SIMULTANEOUS CARDIAC SURGERY AND LEFT SIDED PNEUMONECTOMY

- As the approach for both of surgeries was chosen **median sternotomy**
- The patient was put on CPB and myxoma from left atrium was removed
- The base of tumour included almost whole interatrial septum which had to be partially resected
- The **pericardial patch** was used for closing of defect in IAS

PNEUMONECTOMY ON CPB

- All structures in pulmonary hilum were isolated and cutted off
- The lung carcinoma had **intimate conclusion to outer surface of oesophagus**
- During pneumonectomy the outer layer of oesophagus was injured but there was **no perforation**
- The pericardial patch was used to cover this lesion
- Finally the mediastinal lymphadenectomy was made



PEROPERATIVE DATA

Both surgeries time	256 min	Blood lost	860 mL
Cross clamp time	30 min	Cardioplegia	Cold blood, intermittent
CPB time	150 min	Time on ICU	8 hours
Artificial lung ventilation time	8,5 hours	Left hemithorax drainage time	30 hours

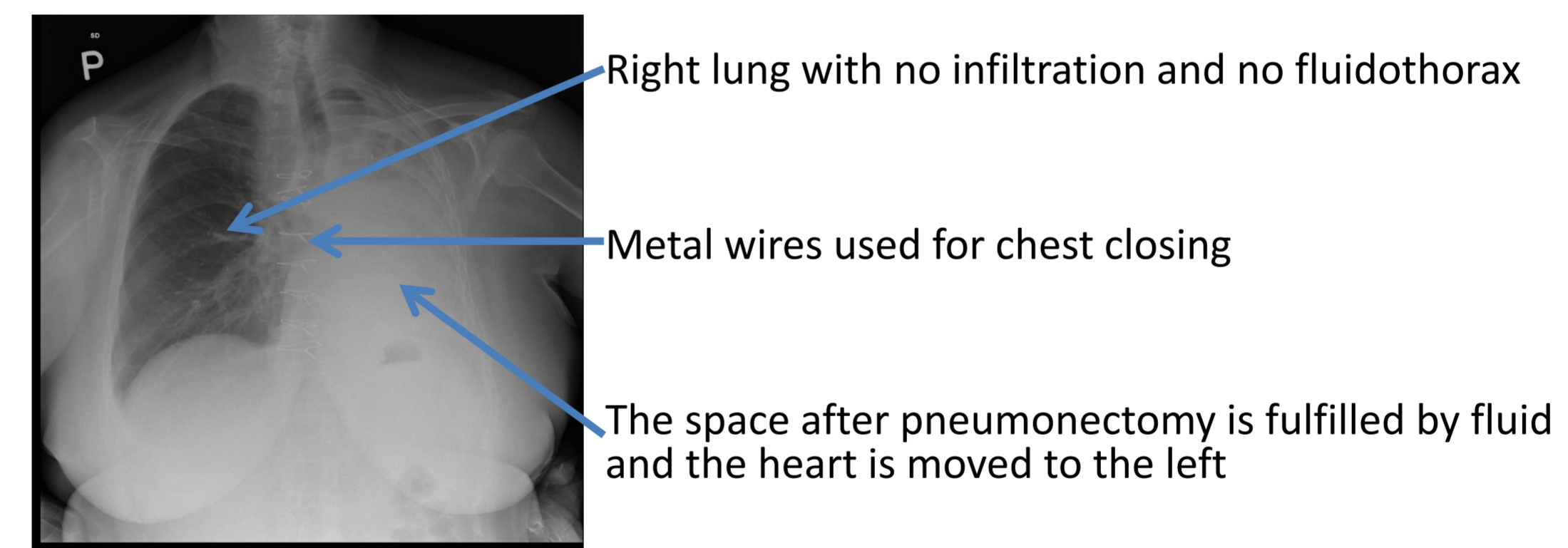


POSTOPERATIVE COURSE

- There was no important problem with patient's ventilation
- No cardiac problems
- No problem with wound healing
- Careful peroral realimentation was necessary because of periprocedural complication
- 11 days after surgery the patient was discharged home
- Oesophageal X-ray investigation 6 days after surgery - no leak to the mediastinum



FINAL RESULT ON CHEST X-RAY



CONCLUSIONS

- Surgical management of concomitant pulmonary and cardiac disease remains controversial (1)
- There is no consensus on the use of a one- or two-staged procedure, the timing of heparinization and the utilisation of cardio-pulmonary bypass.
- **Three problems** related to concomitant heart and lung procedures through median sternotomy are reported (2)
 - The limited exposure for lung resection, particularly for exposure of the lower left lobe hilum and the mediastinal lymph node dissection.
 - The bleeding risk due to heparinization.
 - The risk of mediastinal or sternal infection related to lung resection.
- The concomitant approach has the **advantage** that the patient is spared the expense and potential morbidity of a second operation (3)
- Left lower lobectomy or pneumonectomy, which is usually troublesome through median sternotomy, can be performed under CPB which offers a unique situation in which forward luxation of the heart is not risky (2)
- In this case we found that concomitant cardiac surgery and left pneumonectomy can be performed as a save procedure.

LITERATURE

- (1) CATHENIS K. et al. Concomitant Cardiac Surgery and Pulmonary Resection. Acta Chir Belg, 2009, 109, 306-311.
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- (3) CIRIACO P. et al. Lung resection for cancer in patients with coronary arterial disease : analysis of short-term results. Eur J Cardiothorac Surg, 2002, 22 (1) : 35-40.