

# A heart image extramediastinally shifted to the left pulmonic area

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## ÖZET

### Ekstramediastinal olarak sol akciğer yerleşimli kalp görüntüsü

Geçirilmiş akciğer enfeksiyonu nedeniyle sol akciğer orta ve üst lob bölgesine doğru yer değiştirmiş olan, ekstramediastinal yerleşimli kalp görüntüsünü farklı bir ekokardiyografik pencere kullanarak sunmak istedik.

**Anahtar Kelimeler:** pulmoner enfeksiyon, mediasten dışı kalp, kardiyak görüntüleme

## SUMMARY

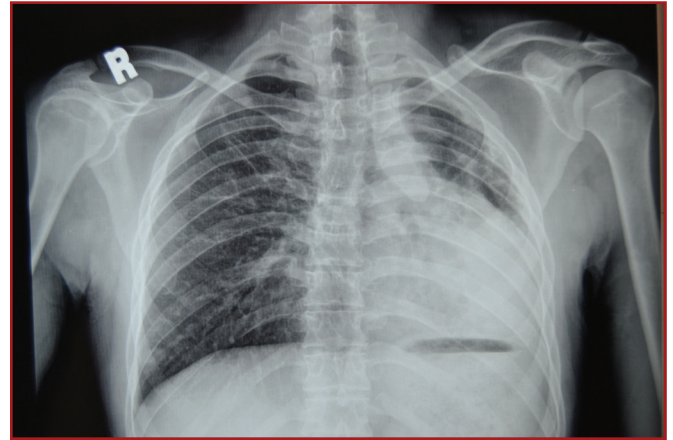
We want to present a heart image extramediastinally shifted to the middle and upper lobe of the left lung due to the former lung infection in a young patient.

**Key words:** pulmonary infection, extramediastinally heart, cardiac imaging

## Introduction

We present a heart image extramediastinally shifted to the middle and upper lobe of the left lung due to the former lung infection in a young patient.

A 22-year-old male patient was admitted to our hospital with the complaints of frequent cough, sputum and shortness of breath on exertion. He had a pulmonary infection on his childhood and after this date dyspnea continued. Blood pressure and pulse were normal and rhythmic but the heart sounds were heard at the corner of the left pectoral muscle and left axilla. The contribution of the left hemithorax to respiration was reduced. Electrocardiogram showed a sinusual rhythm, late transition and right axis deviation. The initial serum CRP was 75,90 mg/L and erythrocyte sedimentation rate was 52 mm/h and they returned to normal limits after 7 days of treatment with antibiotics. On chest X ray, the heart shadow was in the middle and upper lobe of the left lung. (Figure-1). Transthoracic echocardiography revealed no functional and structural abnormality but parasternal long axis and apical four chamber windows were obtained between the left pectoral muscle and left axilla with supine position (Figure-2). Pulmonary function tests were VC:2.49 L (55%), FVC:2.35 L (54%), FEV1:2.2 (59%), FEV1/FVC:94% and revealed signs of restriction.



**Figure 1.** Chest X Ray of the patient with posteroanterior position

On Thoracic CT and MRI sections, the upper trachea was deviated slightly to the left. Mediastinal major vascular structures and the heart were significantly deviated to the left (Figure-3). Heart size was normal and a small amount of the upper lobe of the left lung aeration was observed in left hemithorax. Pericard was also normal. Lingular segment and lower lobe were observed totally collapsed. His symptoms continued since childhood but it had been identified for the first time after admission to our hospital.

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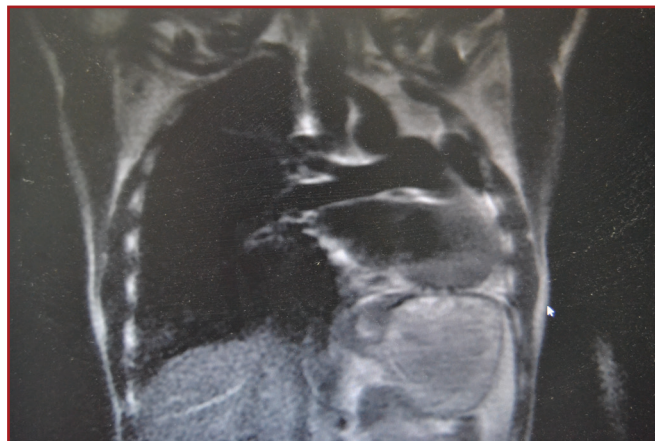
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**Figure 2.** Transthoracic echocardiographic views of the patient at parasternal long-axis

In this way, the shifting of the heart was seen extramedially toward the middle and upper lobe of the left lung. Heart images had been achieved in a different echocardiographic windows with the pectoral muscle and the left axillary region. We wanted to present this original image. For the detection of this type of cases, a detailed history, physical examination and further investigations should be done more carefully.



**Figure 3.** Cardiac magnetic resonance scans of the patient with sagittal plane.