Patient with nonechogenic chest and pleuritic chest pain

Nonekojen göğüs yapısı ve plöritik göğüs ağrısı olan hasta

A 17-year-old female was admitted to emergency room with the complaint of precordial inspiratory, stabbing-crunching chest pain radiating to left arm lasted for 8 hours. She did not have any remarkable medical history, especially any pulmonary diseases, as asthma. She was a non-smoker and healthy high school student.

On physical examination, her blood pressure was 105/60 mmHg on the left arm and 115/65 mmHg on the right arm, with pulse rate 104 beats/min, respiratory rate 20 breaths/min, and body temperature of 36.8°C. Auscultation of the heart revealed normal first and second heart sounds and no murmur or pericardial rub was heard. Because of the noisy environment of the emergency room, auscultation was suboptimal. Blood work up revealed leukocytosis of 15.1x10³/µL. C-reactive protein was 9 mg/L. Blood/arterial gas breathing room air showed pH 7.42, Pa0₂ 54 mmHg, PaCO₂ 35 mmHg and HCO₃ 23 mmol/l. Electrocardiogram (ECG) showed a normal sinus rhythm with 100 bpm.

With a pocket sized handheld echocardiograph (Vscan; GE Healthcare, Wauwatosa, WI) we examined the patient in order to exclude or diagnose any cardiac disorder. But strangely although the patient's chest seems to be very echogenic, totally no image can be obtained. All efforts were useless. Then chest radiography, (Fig. 1) and a thoracic computed tomography (CT)



Figure 2. Thoracic computed tomography images (A,B)



Figure 1. Chest X-ray



Answer: 735



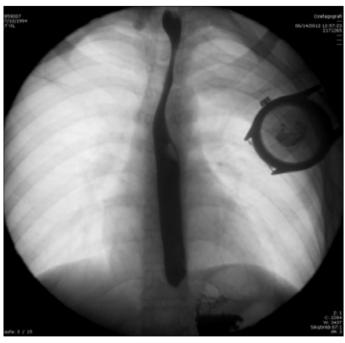


Figure 3. Contrast esophagography

angiography were performed in order to rule out pulmonary embolism or aortic dissection (Fig. 2). By looking for the etiology of the disease, patient received a pulmonary function test and a contrast esophagography (Fig. 3) and they were unremarkable.

What is your diagnosis?

- a) Acute pericarditis
- b) Acute pulmonary embolism
- c) Spontaneous pneumomediastinum
- d) Aortic dissection