Dear Editor,

Thorax trauma constitue 10-15% of all traumas (1). Thorax trauma is supposed to be responsible for 25% of deaths (2). Mortality, morbidity, ventilator care or the hospitalization time increases in patients who present additional diseases such as heart disease, chronic lung diseases, diabetes, and obesity (3). Moreover, the risk of complication development has been declared to be more important for 3 or more rib fractures (4). In the study of Demirhan et al. on 4205 patients, it has been observed that most of the thorax trauma is due to blunt thoracic trauma (1). Traffic accidents are the most frequent causes of thorax trauma in regions where there is not war (5). In the studies of Demirhan and Al-Koudmani, the most frequently observed features as a result of thorax trauma are pneumothorax, hemothorax and rib fractures, respectively (1,5). However, in literature studies, we have not determined any association of rib fracture and acute pulmonary embolism. In this presentation, we aimed to expose a case of rib fracture and acute pulmonary embolism association.

The general state of a 25-years male patient brought to our clinic after a traffic accident in a car is good, the vital results are as follow, arterial tension; 130/85 mmHg, heart rate; 110/ minute, fingertip saturation O2; 94%. In the systemic physical examination, pain sensitivity was present between the 6th-10th ribs in the anterolateral region of the left hemithorax. No additional wounding due to the trauma has been observed in physical examination. The anamnesis has shown that the patient had no known disease, the he does not use any drug, that he does not smoke, drink alcohol or any other noxious substance. Free fluid has not been detected in the abdomen in bedside ultrasonography. A suspicious fracture line has been observed in left 7th-8th ribs in the posterior anterior lung graphy. The result of laboratory analyses were Haemoglobin; 14.6 mg/dl, WBC; 8500 count/L, Platelet; 360.000 count/L, and no abnormality has been detected in biochemical values. In arterial blood gas analysis, the results were pH; 7.45, pCO2 mmHg; 30, pO2; 50 mmHg, Saturation O2: 94%. In spite of the 100% oxygen support provided to the patient, the fingertip oxygen level did not come up 95%. In the thorax angio-tomography performed for advanced examination purpose, acute thrombus has been observed in the upper section of the left pulmonary artery (Figure 1-2).

Heparinization has been started for the patient who had not hemothorax and hospitalized in emergency intensive care unit. No pathology has been detected in the studied thrombophilia panel and in the methyl tetrahydrofolate reductase enzymes. The patient has been discharged from the hospital at the 14th day of the monitoring and treatment.
In this letter, we wanted to show that acute pulmonary embolism may be observed as a complication in patients with traumatic rib fracture and to emphasize on the importance the early diagnosis examinations in suspicious cases.

References


