

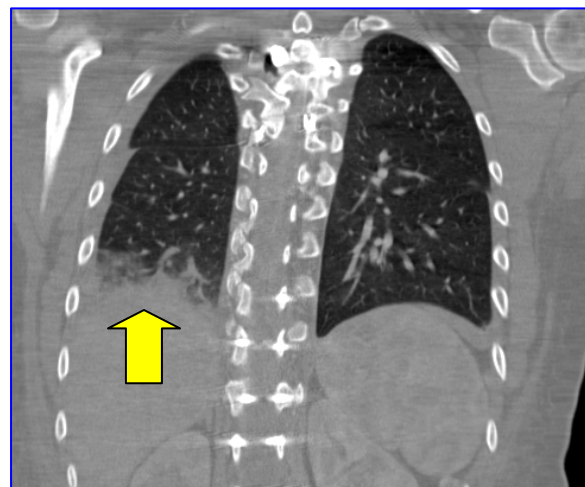
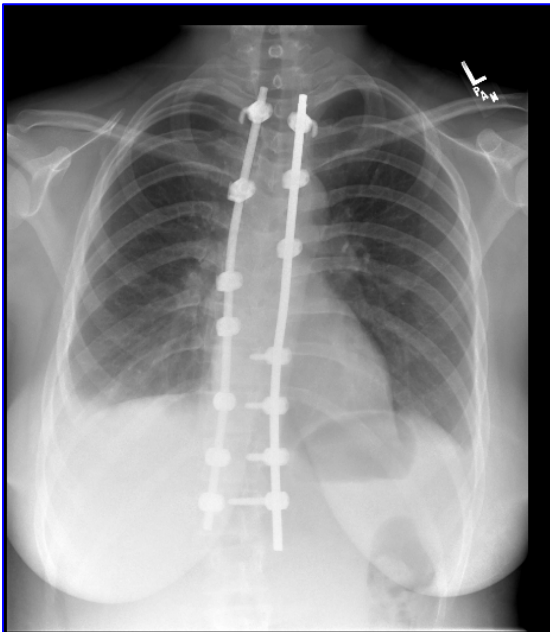
## February Case Study: Post-Op Pulmonary Embolism

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**History of Present Illness:** The patient is a 17-year-old female who is 1 week status post posterior spinal arthrodesis for progressive idiopathic adolescent scoliosis. She underwent posterior spinal fusion from T4 to L1 for a progressive curve. The date of surgery was 02/01/2010. She was discharged home on Saturday 02/06/2010. She did well the first night she was home. However, yesterday evening she developed an acute onset of right-sided chest pain that worsened over the course of the night, and then worsened also this morning with shortness of breath and a sharp right-sided pleuritic chest pain. She had no associated nausea, vomiting or diarrhea. She has had no fevers. She is taking oral pain medication. She does take oral contraceptives which she has taken for the last 2 years. She is last took pain medication (oxycodone) 2 tablets this morning at 10:00 a.m. She has had no fevers and otherwise no change in past medical history.

**Physical Examination:** The patient is a well-appearing 17-year-old female. She is in mild to moderate distress secondary to pain. Temperature 98.8 degrees Fahrenheit p.o. Height is 174.5 cm, weight is 191 pounds O2 sat 93% RA. HEENT: Atraumatic, normocephalic, nondysmorphic. Neck is supple. Chest reveals mildly decreased breath sounds on the right side. Extremities were pink, warm and well perfused with normal capillary refill. She was listing to the right with a moderate residual apparent curve. The posterior spinal incision looked excellent with no evidence of drainage. No evidence of infection. No erythema. She had sharp right rib pain and chest pain with deep inspiration. There was no wheezing. She has good aeration although she was in moderate distress secondary to pain. Abdomen was soft, nondistended. She had good bowel sounds. No palpable mass. No rebound tenderness. Neurologic examination was grossly normal. Normal sensation. Reflexes were 2+ at the knee and ankle. Toes were downgoing to Babinski. Gait was normal, however, it was slightly antalgic with again the listing to the right. She was able to stand briefly on her heels and toes

### Radiographs (AP/Lat Chest):



**Radiographs:** Chest CT scan- Multiple bilateral pulmonary emboli, Patchy opacities within the right lower lobe which may represent hemorrhage from associated lung infarction or infectious process, Small bilateral pleural effusions, greater on the right than the left

**Diagnosis:** Acute Right Lower Lobe Pulmonary Embolism

**Impression/Plan:** The patient is a 17 year-old female who is 7 days s/p posterior spinal arthrodesis for progressive scoliosis. She was discharged home on POD #5 and returned to the outpatient clinic after developing acute right sided pleuritic chest pain and shortness of breath over the last 24 hours. Physical examination, x-rays, and CT scan of the chest revealed an acute right lower lobe pulmonary embolism. Possible etiologies/risk factors include hypercoagulable state due to recent surgery in combination with OCP side effects or predisposition to blood clots due to an underlying abnormality such as Factor V Leiden, Anti-thrombin III deficiency, Protein C or Protein S deficiency or Prothrombin gene mutation. She was admitted to the pediatric ICU where anticoagulation therapy was initiated. She was placed on supplemental O<sub>2</sub> to maintain O<sub>2</sub> sat >96%. She was also started on high dose heparin with goal PTT of 60-85 seconds.