

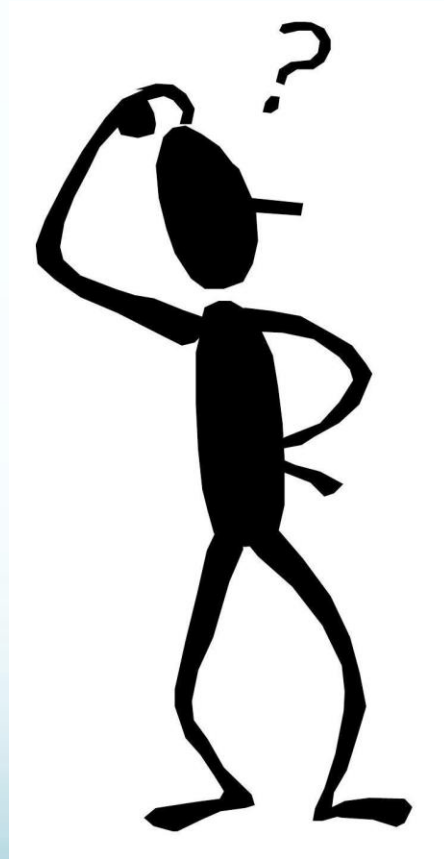
Case presentation

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- A 25 year old male patient presented with 2 days of a sharp pain, initially centrally located on the chest, slowly moving towards the left side of thorax. The pain worsened with respiration and when he lied onto the left side of the body. He had no other symptoms.
- He remembered having a cold a month prior to admittance.
- He did not have any prior disease history, and did not use any medication. There was no history of heart disease in the family.

- He had stable vital signs, he was afebrile and had symmetrical pulse in extremities.
- Auscultation unveiled a rubbing/crackling sound over most of the pericardium. Clinical examination was otherwise normal.

Differential diagnosis and work-up plan?

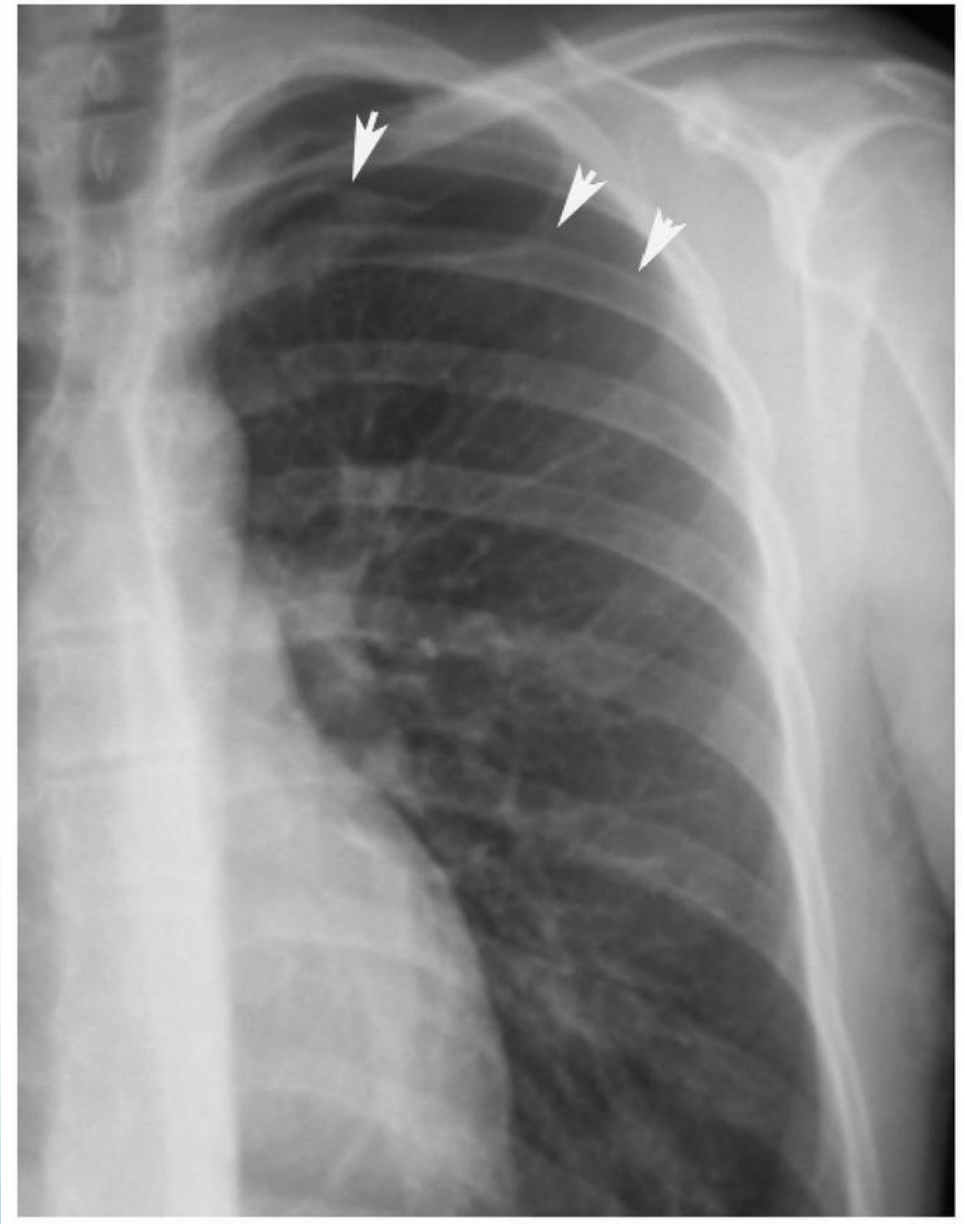


- Pericarditis
- Pneumothorax

(Pleuritis, Pulmonary embolism, Aortic dissection, Coronary heart disease, Myocarditis, Pneumomediastinum, Pneumonia, Myalgia...)

- ECG: Normal.
- Bloodtests (CRP, sedimentation rate, leukocytes, d-dimer, haemoglobin, electrolytes, troponin-T): Within reference range.
- Eccocardiography: Normal.
- Chest x-ray: Normal.

- The patient was discharged with the diagnosis pericarditis.
- Short time after, the patient was admitted into hospital once more with chest pain similar to the one he had before. This time he also had slight tachypnea. Chest x-ray showed a an apical pneumothorax of 3 mm on the left side.
- Looking back on the x-ray taken earlier, one could see a small apical pneumothorax then also.



Diagnosis and treatment

- ”Noisy” spontaneous pneumothorax.
- Pneumothorax is often misdiagnosed as pericarditis.
- The rubbing/crackling sound heard over the pericardium is due to mechanical pressure created by heart contractions upon pockets of intrapleural air. Most often during a leftsided apical pneumothorax.
- The patient was followed with regular chest x-rays until the pneumothorax went into complete regression.

References/further reading

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