

## RADIOLOGY: Chest Radiograph Examples

These are examples of CXR presentations; they are made-up cases! It is important to be fluent when presenting and these are examples of some of the common pathologies which might arise in a radiology OSCE examination. Sometimes an examiner might want you to give the 'spot diagnosis' eg. '*pneumothorax*', rather than giving a full presentation like the examples below.

### Right lower zone consolidation

*This is a PA chest radiograph of Miss Smith taken on 1/1/15. It is technically adequate. The most striking feature is the increased opacity in the right lower zone. It obliterates the right costophrenic angle, and I am able to see an air bronchogram within the area of opacity. The right apex and left lung field appear normal. The trachea is central, the heart of normal size, and there is no abnormality of the bones or soft tissues. I can see the gastric bubble. In summary, there is an abnormality in the right lower zone and I suspect this patient has **consolidation** of her right lower lobe.*

### Pleural effusion

*This AP portable chest radiograph was taken of Mr. Brown yesterday. It is technically adequate. The main abnormality is a large area of increased opacity in the left lower zone. There is a meniscus and it looks like a left sided pleural effusion. The trachea is deviated to the right. The mediastinum is not displaced, and the right lung field looks normal. There is no abnormality of the bones or soft tissues. I also note the patient has cardiac monitoring wires and oxygen tubing. In summary, this patient looks critically unwell, with a left sided **pleural effusion**.*

### Pneumothorax

*This is a PA chest radiograph of Mr. Shah, which was taken today. It is technically inadequate because I am unable to see the costophrenic angles. However, the most striking feature is a rim of air surrounding the apex of the right lung. The rest of the lung fields appear normal. The mediastinum is not displaced and the heart is not enlarged. The trachea is central and there is no abnormality of the bones or soft tissues. In summary, there is an abnormality at the apex of the right lung field, which is consistent with a **pneumothorax**.*

### Consolidation and humeral fracture

*This portable AP chest radiograph was taken of Mrs. Johnson three days ago. It is technically adequate. The most striking abnormality is an area of increased opacity in the right middle zone, with loss of the right heart border. There are air bronchograms within this area of opacity. I am able to see both costophrenic angles. The left lung field appears normal. The trachea and mediastinum are not displaced. The soft tissues look normal, but I note a fracture of the greater tuberosity of the right humerus. The patient has oxygen*

tubing in situ. In summary, I think this is a lady who has **consolidation** of the right middle lobe, and a **fracture** of the right humerus.

### Pulmonary oedema

*This is an AP chest radiograph of Mr. Dobson, which was taken today. It is technically adequate. Both costophrenic angles are blunted, and there are small menisci on both sides. There is fluid in the horizontal fissure. There is upper lobe diversion and alveolar shadowing throughout the lung fields. The trachea and mediastinum are not displaced. The heart appears enlarged. There is no bony or soft tissue abnormality. This patient has an endotracheal tube, and an NGT in situ (the tip of which lies in the gastric bubble). There is also cardiac monitoring visible. In summary, this patient is critically unwell, and is probably in ITU. The radiograph findings are suggestive of **pulmonary oedema**.*

### Pulmonary metastases

*This is a PA radiograph taken today, of an unknown female patient (breast markings are visible). It is over exposed. However I am still able to see several round areas of increased opacity. There are three in the left lung field and two in the right lung field. The trachea and mediastinum are not displaced and there is no bony or soft tissue abnormality. The costophrenic and cardiophrenic angles are clear and I can see the gastric bubble under the left hemi-diaphragm. In summary there are multiple areas of increased opacity in both lung fields, which are suspicious for lung **metastases**.*