

PART 1 | IMAGING IN CLINICAL PRACTICE

Radiological signs of lung collapse

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Middle age man, smoker presented with shortness of breath associated with cough. Figure 1 is the chest X ray of the patient

Q1: describe the CXR findings?

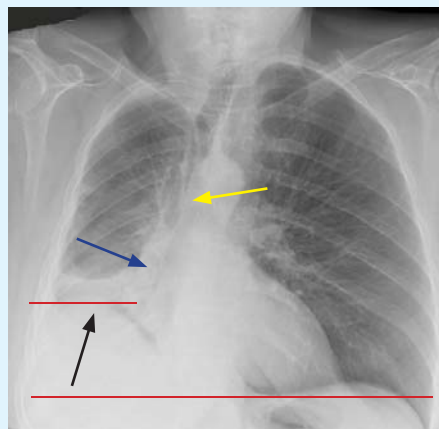
Q2: what is the radiological diagnosis?

Q3: What are the radiological signs of lung collapse?



Answer of Q1:

Black arrow >>> Elevated right hemi-diaphragm.
Yellow arrow >>>Tracheal and mediastinal shift.
Blue arrow >>> Silhouette sign of the right heart border.



Answer of Q2:

Right middle lobe collapse.

Answer of Q3:

There are direct and indirect signs:

DIRECT SIGNS OF COLLAPSE

- **Displacement of the interlobar fissures:** this is the most reliable signs and the degree of displacement will depend on the extent of collapse.
- **Loss of aeration:** increased density of the collapsed segment(s) of the lung may not be apparent until collapse is almost complete.
- **Vascular and bronchial signs:** if the lobe is partially collapsed, crowing of its vessels may be visible.

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INDIRECT SIGNS OF COLLAPSE

- **Elevation of the hemidiaphragm:** Occurs mostly in lower lobe collapse.
- **Mediastinal displacement:** In the upper lobes the trachea is usually displaced toward the collapsed lobe and the heart is displaced in the lower lobe collapse.
- **Hilar displacement:** The hilum may be elevated in the upper lobe collapse and depressed in the lower lobe collapse.
- **Compensatory hyperinflation:** the normal part of the lung may become hyperinflated, and it may appear hypertransradiant.

REFERENCES

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