Unusual Cause of Pulmonary Emboli*

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Pulmonary emboli resulted due to intravasation of iophendylate during myelography the previous day. Findings consistent with pulmonary emboli in nonambulatory patients after myelography should not always be diagnosed as thromboembolic disease from blood clots.

In a bedridden neurologic or orthopedic service patient, pulmonary emboli occur with regular frequency in a certain percentage of susceptible individuals. Clinical assessment still plays a major role in the diagnosis of pulmonary emboli. Anticoagulation therapy is not without its complications. A patient in this setting is presented who had the clinical findings of pulmonary emboli. However, these emboli were secondary to intravasation of iophendylate (Pantopaque) during myelography from the previous day.

Case Report

A 49-year-old woman, after being in traction for low back syndrome for one week, was examined because of the onset of bilateral lower lobe pleuritic chest pain, and a pleuritic rub bilaterally was discovered. Chest x-ray films showed bilateral costophrenic angle blunting which was not evident on the chest film (Fig 1) after a

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FIGURE 1. Bilateral costophrenic angle blunting (this finding was not present on a routine chest x-ray film after a myelogram on the previous day).

Figure 2. Magnified view of the left base of the film in Figure 1. Dye can be seen outlining small distal pulmonary arteries.

myelogram the previous day.

Upon closer inspection of this chest x-ray film taken after the myelogram (which was initially read as normal), dye could be seen outlining small distal pulmonary arteries in both costophrenic angles (Fig 2, magnified insert of the left base).

Discussion

Hinkel described the first case of intravasation of iophendylate (Pantopaque) during myelography. Few reports since then have had roentgenographic demonstration of pulmonary embolization. The mechanism of this has been previously worked out. There are intricate intraspinal plexuses that anastomose freely and end in the intervertebral veins which ascend eventually via the lumbar and sacral veins into the inferior vena cava. Oil embolism usually does not produce pulmonary infarction because of the small size of the globules.

This case is reported in the hopes that findings consistent with pulmonary emboli in nonambulatory patients after a "dye study" would not always mean thromboembolic disease from blood clots.

References

3. Townes LC. Pulmonary embolism during myelography. JAMA 1965; 193:162-63