Phantom Lung Tumor and Bronchogenic Carcinoma in the Same Patient
Report of a Case

JORMA K. TAKALA* AND TAUNO LAES, M.D.**
Kinkomaa, Finland

LOCALIZED INTERLOBAR EFFUSIONS IN congestive heart failure or phantom lung tumors are considered to be relatively rare conditions. In these cases, dense homogenous shadows are seen in the chest x-ray films. The shadows may appear in any shape and they greatly resemble pulmonary tumors. Congestive heart failure is always present, and a characteristic of the tumor is that it disappears when the patient is given digitalis and diuretics.1-4

According to Willerson et al.,5 at least 48 cases of phantom lung tumor are reported in the world medical literature, whereas the present writers have not met any report of a case where true pulmonary neoplasm had occurred in a phantom lung tumor patient. For this reason, we wish to present a patient who had this condition and who now, four years later, was found to have true bronchogenic carcinoma.

CASE REPORT
V.J., a 63-year-old farmer, was admitted to the Central Hospital of Middle Finland in Jyväskylä, in August, 1961. For five years he had had progressive dyspnea and edema of the legs. Physical examination revealed enlargement of the heart, edema of the legs, and rales over both lungs. The edge of the liver was 5 cm. below the costal margin. The electrocardiogram showed a lowered ST and a negative T wave in leads V₂-V₅. The patient was afebrile, and no tubercle bacilli were found in four sputum specimens.

Chest x-ray film (Fig. 1) showed cardiac enlargement and pulmonary congestion. There was pleural fluid on both sides, and a wedge-shaped shadow in the right mid-lung, extending from the mediastinal shadow to the lateral thorax wall.

![Figure 1: Chest x-ray film before treatment, showing cardiac enlargement and pulmonary congestion. There is pleural fluid on both sides, and a wedge-shaped shadow in the right mid-lung extending from the mediastinal shadow to the lateral thorax wall.](image1)

![Figure 2: Chest x-ray film nine days later, after treatment with digitalis and diuretics. The "tumor" has disappeared, but there still remains a thickened interlobar fissure in the anteroposterior view.](image2)
FIGURE 4: Clumps of cells of varying size and shape, with irregular hyperchromatic nuclei. The diagnosis is carcinoma epidermoidum bronchi.
might be of interest to study extensive series of patients with congestive heart failure with a view to finding those that may have died of pulmonary carcinoma. Had any of them ever had a phantom tumor, it might be recognizable in chest X-ray films by a thickened interlobar fissure.

Men over 45 years of age, who are chronic heavy cigarette smokers, belong to the high-risk group and should be candidates for periodic screening by radiologic and cytologic examination. If phantom lung tumors are seen in smokers, they should be examined carefully because there is a possibility that they will later develop true pulmonary neoplasms. Serial examinations can be done after the congestive heart failure has been successfully treated.

REFERENCES

AVULSION OF RIGHT MAIN STEM BRONCHUS

A case of traumatic rupture of the right main stem bronchus caused by nonpenetrating injury to the chest is presented. Operation was performed three months after the injury and consisted of excision of the stricture and restoration of bronchial continuity by end-to-end anastomosis. Bronchography study after the operation showed normal tracheobronchial branching.


PATHOGENESIS AND TREATMENT OF HYDROTHORAX

Eighteen cases of hydrothorax were seen among 330 consecutive hospital admissions for cirrhosis of the liver and ascites. Twenty-four hours after thoracentesis and the injection of 1% albumin into the ascites of nine patients, a gradient of specific activity from reformed pleural fluid to plasma in eight patients, and additionally to thoracic duct lymph in four patients, indicated that the ascites was forming the hydrothorax directly across the diaphragm. The presence of a diaphragmatic defect was confirmed by the development of a pneumothorax on the side of the hydrothorax after induction of pneumoperitoneum in five patients. Three patients underwent thoracoscopy, and after pneumoperitoneum in one, air bubbles were seen coming through an otherwise undetectable diaphragmatic defect. It was concluded that hydrothorax-complicating cirrhosis of the liver is generated from ascites through such defects acquired as a result of increased intraabdominal pressure. Treatment is directed toward eliminating the ascites by the use of diuretic agents and dietary sodium restriction.