

Adequate experimental trial should precede the clinical use of any untested plastic material in surgery.

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CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

Weekly Clinicopathological Exercises

FOUNDED BY RICHARD C. CABOT

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CASE 33111

PRESENTATION OF CASE

A thirty-seven-year-old Swedish asbestos worker entered the hospital because of cough and chest pain.

Two and a half years before admission the patient had developed a cough, nasal congestion, nasal discharge, fever and shortness of breath that had persisted one week and had been followed by a dull, aching pleuritic pain along the left costal margin. He was hospitalized for a week and then rested at home for four months. In the hospital about 1000 cc. of fluid was removed from the left side of the chest. Subsequently, he returned to work and felt well except for a morning cough productive of small amounts of odorless white sputum. Occasional chest pain and exertional dyspnea were also noted. A year and a half later there was an insidious onset of weakness and fatigability and a gradual loss of 25 pounds in weight. Three months before entry the pleuritic pains became persistent, and the weakness and dyspnea severe, and the patient slept propped on two pillows. Repeated sputum smears were negative for tubercle bacilli.

The patient's work consisted in cutting asbestos insulating board; he denied exposure to undue

amounts of dust. There was no history of exposure to tuberculosis.

Physical examination revealed the patient to be orthopneic and breathing rapidly at a rate of 30 per minute, with a dry, hacking cough and clubbed fingers. There was a slight, shotty, generalized lymphadenopathy. Respiratory expansion on the left was diminished, as were tactile and vocal fremitus and breath sounds. On the right there were increased bronchovesicular breath sounds and scattered dry rales. The heart and mediastinum were shifted to the right, and the apical beat was maximal in the right midclavicular line. There was a ticktack rhythm with a rate of 110, and a pulsus paradoxicus. The abdomen was normal.

The temperature was 100°F. The blood pressure was 128 systolic, 70 diastolic.

Examination of the blood disclosed a red-cell count of 4,900,000 and a white-cell count of 12,200, with 77 per cent neutrophils, 16 per cent lymphocytes and 7 per cent monocytes. The urine and stools were normal. X-ray examination showed numerous discrete areas of increased density scattered over the right lung; pressing on the lower trachea and left main bronchus and deviating them to the right was a large mass measuring 11 cm. in diameter (Fig. 1). A small amount of aerated lung was seen at the periphery of the mass. There was either fluid or, more probably, dense pleural thickening and collapsed lung between the mass and the lateral costal margin. The left lower-lung field was almost completely opaque.

In the hospital the patient's condition became steadily worse. Further x-ray studies showed displacement of the esophagus to the right (Fig. 2), extensive periosteal new bone formation of the left upper ribs, slight displacement of the stomach to