Sterile Hemopneumothorax Due to Pulmonary Infarction

ALBERT V. MYATT, M.D.*
New Orleans, Louisiana

Sterile hemopneumothorax due to rupture of a pulmonary infarct has been reported infrequently. In 1947 Rawson and Cocke† were able to find only five cases reported. They added a sixth case. In 1949 Masson and Hartman‡ reported another case—the seventh.

Five of these seven reported cases were confirmed by autopsy. In all five proved cases heart disease with congestive failure was the primary disease. Report of an additional case—presumably the eighth—follows:

A 24 year old Negro male began to have dyspnea on exertion in 1948. As a child he had joint pains, but was never told that he had rheumatic fever. He served in the Army from 1943 to 1945 and had no illness.

In November, 1949 he was hospitalized at the U. S. Public Health Service Hospital in San Francisco, California, because of increasing dyspnea and cough. His heart was enlarged and a loud high pitched blowing systolic murmur was heard at the apex and transmitted to the axilla. A diastolic gallop rhythm was present. His blood pressure was 110/82 and pulse 112. Coarse moist rales were heard at the bases of his lungs. Electrocardiogram showed left ventricular hypertrophy. Chest x-ray film showed an enlarged heart. He improved with treatment and went back to work—taking digitalis leaf and using a low sodium diet.

He was hospitalized on two other occasions but continued to do light work as a porter until June, 1950. After that date he remained at home at rest. He continued to take digitalis and remained on a low sodium diet.

His final hospital admission was in October, 1950. He was acutely ill and in respiratory distress. He complained of marked dyspnea, hemoptysis and left upper quadrant abdominal pain. Blood pressure was 90/78. He appeared cyanotic. There was venous distension. The heart was enlarged; diastolic gallop rhythm and a loud apical systolic murmur were present. Over the left lung, loud coarse moist rales were elicited throughout. The right lung showed markedly reduced breath sounds, but the percussion note was equal to that on the left side. A bedside chest x-ray film revealed pneumothorax on the right with partial collapse of the right lung. Oxygen and other measures for acute heart failure were used but the patient died shortly after admission to the hospital.

Autopsy showed air and 500 cc. of bloody fluid in the right pleural cavity. The right lung weighed 825 grams and was atelectatic. There were multiple areas of infarction throughout the right upper and right lower lobes. They were hemorrhagic in nature and showed a sharp demarcation between the infarcted areas and the adjoining lung parenchyma. A sub-pleural infarction in the right upper lobe showed a tear which had allowed escape of air and blood into the right pleural cavity. The left lung also showed infarcts which were smaller and older than those in the right lung. The heart weighed 550 grams. The left ventricle was hypertrophied. There was dilatation of all chambers. The mitral ring was dilated, measuring 5.0 cm. in diameter. The spleen and kidneys showed old infarcted areas. The pulmonary infarcts apparently arose in the dilated chambers of the right heart.

*Surgeon, U. S. Public Health Service. USPHS Hospital, New Orleans, Louisiana.
A case of sterile hemopneumothorax due to rupture of a pulmonary infarct is presented. The patient had rheumatic heart disease with congestive failure as the primary diagnosis. Only seven similar cases have been previously reported.

RESUMEN
Se presenta un caso de hemoneumotorax consecutivo a ruptura de un infarto pulmonar. El enfermo tenía enfermedad cardiaca reumática con insuficiencia congestiva como diagnóstico primario. Solamente se han referido siete casos similares previamente.

REFERENECES