MEDICAL GRAND ROUNDS
PARKLAND MEMORIAL HOSPITAL
April 19, 1962

Current Status of Needle Biopsy of the Parietal Pleura

CASE #1:

A 27-year-old female graduate student was admitted with history of minimal cough of two months' duration and acute fever and right pleuritic chest pain of two weeks' duration. Physical examination and chest x-ray were unremarkable except for the presence of a small right pleural effusion. Old tuberculin skin test was positive, fungus skin tests negative. Needle pleural biopsy revealed granulation tissue with giant cells.

CASE #2:

A 45-year-old Negro male was seen by his local physician on several occasions because of progressive gait disturbance of two months' duration. Varying neurologic changes were noted by this physician. He was referred to the neurosurgical service with a provisional diagnosis of brain tumor or multiple sclerosis. Physical examination revealed an extremely unsteady gait and weakness of the left side. Routine chest x-ray revealed a small left pleural effusion. Needle biopsy revealed caseating granuloma. All symptoms cleared on antituberculous chemotherapy.

CASE #3:

A 37-year-old minister was admitted to the medical ward with fever of undetermined origin. The usual diagnostic studies were not productive and the patient did not respond to a trial of antibiotic therapy. A small pleural effusion was noted shortly after admission and studies of fluid obtained at thoracentesis were non-productive. After approximately one month's hospitalization, needle biopsy was performed and revealed caseating granuloma Tubercle bacilli were cultured from the pleural fluid approximately one month later. The patient had an uneventful recovery on routine antituberculous therapy.

CASE #4:

A 65-year-old white female was admitted to the Gyn. service with a massive right pleural effusion. Past history revealed carcinoma of the cervix treated with radium and hysterectomy approximately three years prior to admission and pulmonary tuberculosis 28 years prior to admission. Chest x-ray revealed the massive pleural effusion and a small amount of fibrous stranding at the left apex. Over a four-month period, the patient had multiple thoracenteses and pleural fluid was always negative for malignant cells. Needle biopsy of the

pleura revealed caseating granulomas and metastatic squamous cell carcinoma.

CASE #5

A 36-year-old white male painter was admitted with a three-week history of severe right chest pain and fever. Physical examination and chest x-ray revealed only a massive right pleural effusion. Old tuberculin skin test was positive. Needle biopsy revealed metastatic carcinoma of the parietal pleura.

CASE #6

A 60-year-old white male with arteriosclerotic heart disease had multiple thoracenteses over a period of several months for pleural effusion felt to be of cardiac origin. Needle biopsy revealed metastatic carcinoma.

CASE #7

A 68-year-old white male presented with fever, left pleural effusion, weight loss pruritis and dependent edema. Physical examination revealed the relatively massive effusion, moderate edema and moderate lymphadenopathy. A clinical diagnosis of lymphoma was made; however, four peripheral node biopsies were not diagnostic. The second needle pleural biopsy revealed tissue diagnostic of malignant lymphoma.

CASE #8

A 41-year-old white female housewife gave a rather typical history of rheumatoid arthritis of two years' duration A subcutaneous nodule had been typical of the rheumatoid nodule. She was admitted because of the appearance of bilateral pulmonary nodules and small bilateral pleural effusions She denied pulmonary symptoms at that time, but was having rather severe local and systemic symptoms from her arthritis. The third needle biopsy of the pleura revealed a typical rheumatoid nodule. Thoracotomy later substantiated the finding of rheumatoid nodules of the pleura and lung.

CASE #9

A 68-year-old white female presented with an eight-month history of chest pain and cough with x-ray findings of a right upper lobe mass and right pleural effusion. Needle biopsy revealed only dense non-specific fibrosis. Fluid cytology was positive for malignant cells and carcinoma of the lung was proven at autopsy.

CASE #10

A 26-year-old Negro male was admitted with a two-week history of fever and malaise with slight left pleuritic chest pain. OT skin test was positive, fungus skin tests negative. Needle biopsy of the pleura revealed only non-specific fibrosis on two occasions. The gastric washings were later positive for tubercle bacilli on culture and the patient responded to routine anti-tuberculous chemotherapy.

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