X-RAY FILM OF THE MONTH
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Clinical History
A 58 year-old white man was first seen in the University of Oklahoma outpatient clinic in 1954 complaining of weight loss, chest pain and dyspnea. A chest x-ray film (Fig. 1) demonstrated a small left pleural effusion and questionable hilar lymphadenopathy. Granulomatous infiltration and sarcoidosis were considered clinically. All skin tests were negative.

He left the state and was not seen again until 1958, when congestive heart failure was thought to be present. Multiple systemic complaints were present. Chest roentgenograms (Fig. 2) revealed several spherical densities in the parenchyma resembling metastatic disease. Thoracic laminograms were compatible with metastatic nodules, although granulomas could not be excluded.

An intensive search of the gastrointestinal tract, nasopharynx and paranasal sinuses failed to identify a primary site. Films of the extremities showed rheumatoid changes in the phalanges. Skull films were negative.

In January, 1959, thoracotomy was performed and a lung biopsy was reported to show caseating chronic granuloma. The patient was discharged with the diagnoses of chronic pulmonary granulomatous disease and rheumatoid arthritis.

The patient was readmitted in August, 1960, with evidence of pulmonary decompensation, malaise, emaciation and bizarre neurologic

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findings suggesting lower motor neuron involvement. Ischemic changes in the phalanges bordered on frank gangrene. A chest x-ray film (Fig. 3) revealed extensive bilateral fibrotic and nodular infiltrate, pleural effusions, and evidence of generalized loss of lung volume.


**Answer:** WEGENER'S GRANULOMATOSIS

The Department of Radiology suggested the diagnosis of Wegener's granulomatosis on the basis of the roentgen appearance of the lungs, biopsy material and the presumptive presence of arterial disease. Biopsies were obtained of the deltoid muscle and an axillary lymph node. The pathologic report was chronic lymphadenitis and periarteritis nodosa. These findings were felt to be compatible with Wegener's granulomatosis. A genito-urinary work-up was negative.

The patient was begun on large doses of steroids and general supportive measures with some subjective clinical improvement.

The Committee on Chest Roentgenology welcomes comments. We would also be pleased to receive x-ray films of exceptional Interest with brief history. Please submit material to: Benjamin Felson, M.D., chairman, Department of Radiology, Cincinnati General Hospital, Cincinnati, Ohio.