A 32-year-old African-American man with a prior diagnosis of biopsy-proven sarcoidosis presented in July, 1994, with a complaint of increasing dyspnea on exertion, decreased exercise tolerance, and a mild nonproductive cough over the preceding 3 months. His original diagnosis had been made in 1991 when he developed left eye discomfort and a lacrimal gland biopsy confirmed sarcoidosis. He was subsequently found to have involvement in his sinuses and left scrotum, but he had not had intrathoracic disease. He was treated with prednisone for 2 years but had taken no medications for 12 months. Physical examination revealed decreased breath sounds at his left lung base. A 2×3-cm left anterior cervical lymph node and a similar-sized subcutaneous nodule on the anterior aspect of his mid-left thigh were noted. Both were nontender and rubbery. The patient had no prior history of peripheral adenopathy.

Laboratory examination revealed a mild hypochromic anemia with a hematocrit value of 37% and mean corpuscular volume of 77 cu μm. The erythrocyte sedimentation rate was 32 mm/h, lactate dehydrogenase, 141 U/L (normal 28 to 186); and angiotensin converting enzyme, 224 U/L (normal 8 to 32).

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Posteroanterior chest radiograph (Fig 1) showed bilateral hilar and right paratracheal adenopathy, and a new dense opacification of the left lower thorax, which tracked up along the lateral chest wall and involved the apex. Bilateral decubitus films showed that there was no “layering” of fluid. CT of the chest confirmed bilateral hilar and mediastinal adenopathy. Parenchymal disease was noted to be confined to the left hemithorax with thickening of the interlobular septa, cystic changes consistent with early fibrosis and circumferential thickening of the pleura, forming a “rind” around the lung. Pleural effusions were not noted. Figure 2 is representative of the pleural thickening.

What is the diagnosis?
involvement of the pleura in sarcoidosis with the presence of noncaseating granulomas was first reported in 1933[^9] and subsequently has been fairly well described. Radiographically apparent gross pleural thickening in sarcoidosis is extremely rare. The differential diagnosis for unilateral pleural thickening includes fibrothorax postpleural effusion, silicosis, talcosis, asbestosis, and diffuse mesothelioma. Sarcoidosis is often overlooked in the differential diagnosis. Wilen et al[^10] reported on eight cases of pleural sarcoidosis with six having unilateral involvement. All of these patients had "advanced stage" disease, ie, stage 3 or 4. Of note is that none of these patients had a pleural effusion at the time. The review by Wilen et al[^10] of the literature revealed five additional cases of pleural thickening without an associated pleural effusion. It is believed by most authors that microscopic involvement of the pleura with granulomas precedes the appearance of a pleural effusion. Pleural thickening, however, can occur independent of an effusion. In the report by Wilen et al.,[^10] two patients with pleural effusions subsequently went on to develop pleural thickening. To our knowledge, the circumferential pleural thickening forming a "rind" around this patient’s left lung has not been described.

While the list of manifestations of sarcoidosis is already quite extensive, new findings continue to be added. We would like to add unilateral circumferential pleural thickening to this list.

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**Figure 2.** CT of the chest showing circumferential thickening of the pleura and fissure in the left hemithorax.

**Figure 3.** Resolution of the left-sided parenchymal and pleural process after treatment.
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