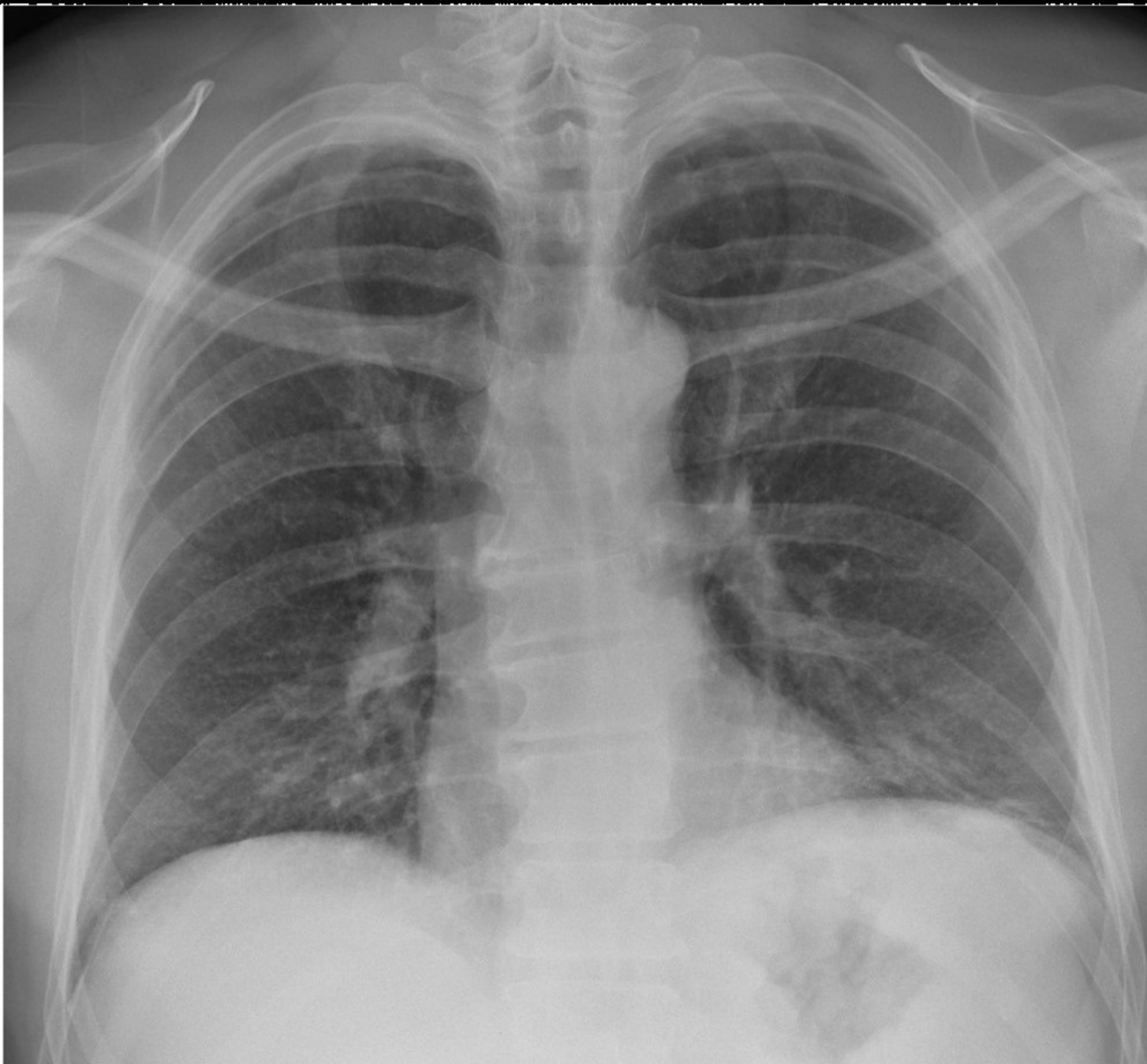
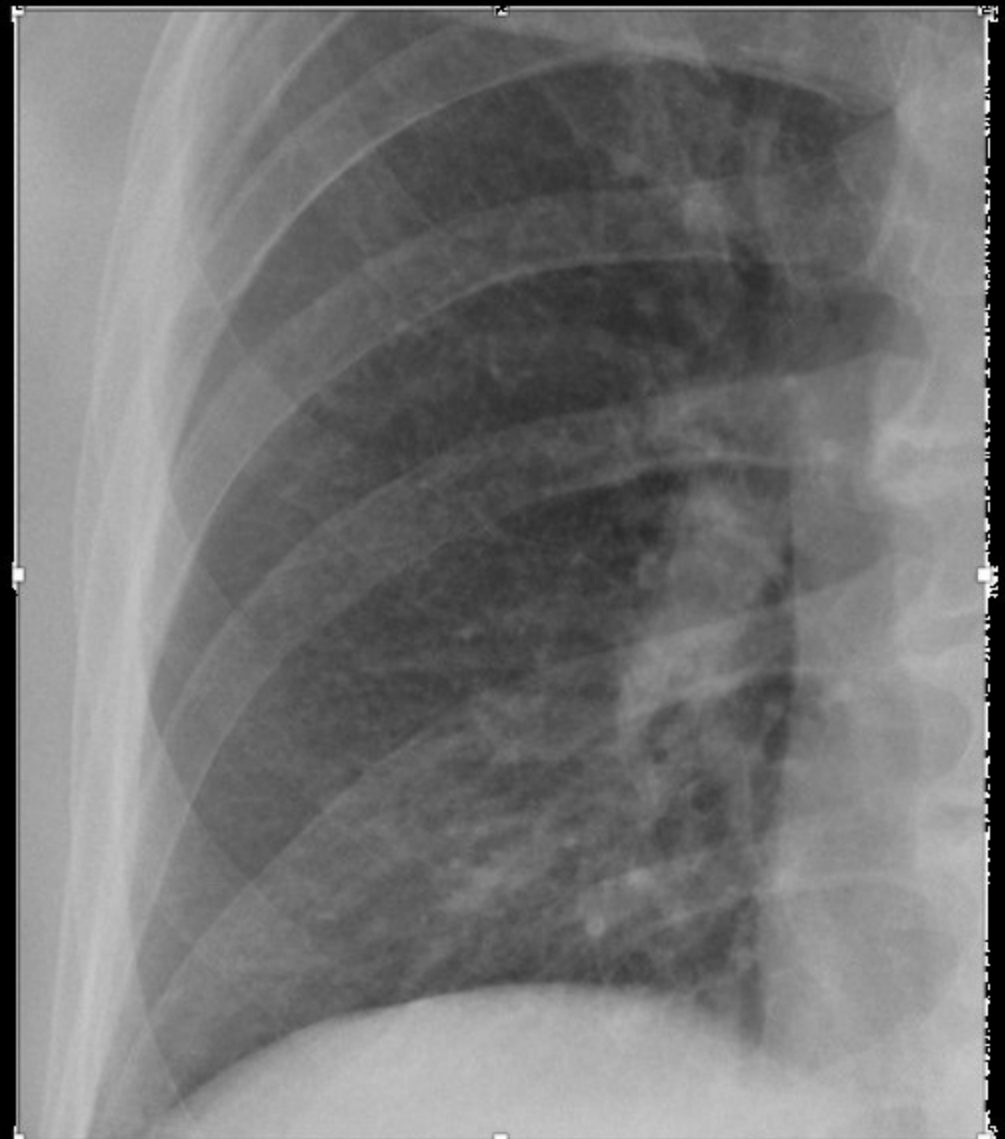


Figure 1: Image of acute silicosis demonstrating diffuse nodular opacities.

2a



2b



2c



Figure 2: Chest radiograph Fig 2a shows extensive p/q opacities better seen in detail view (Fig 2b) CT (Fig 2c) shows primarily centrilobular distribution of nodules characterized by relative uniformity of nodule size, spacing, and sparing of the immediate subpleural area.

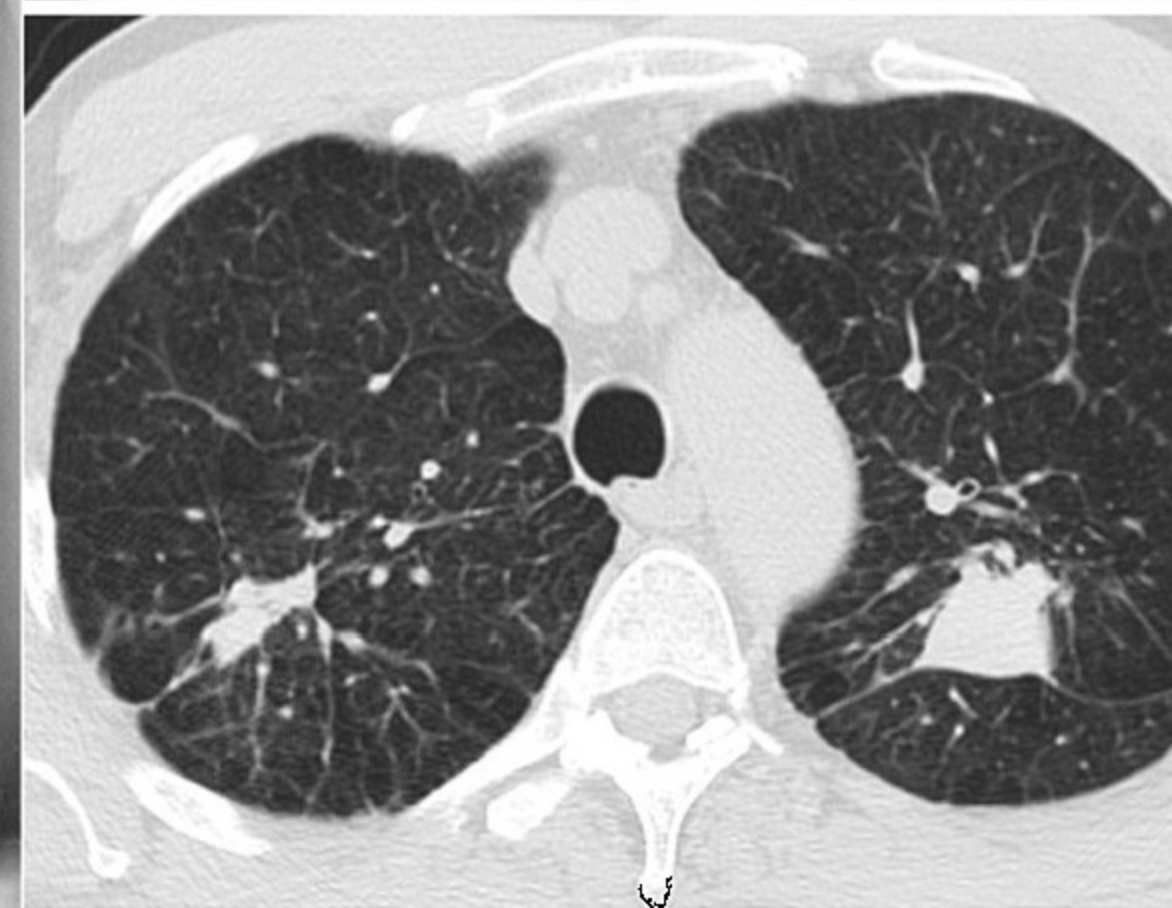
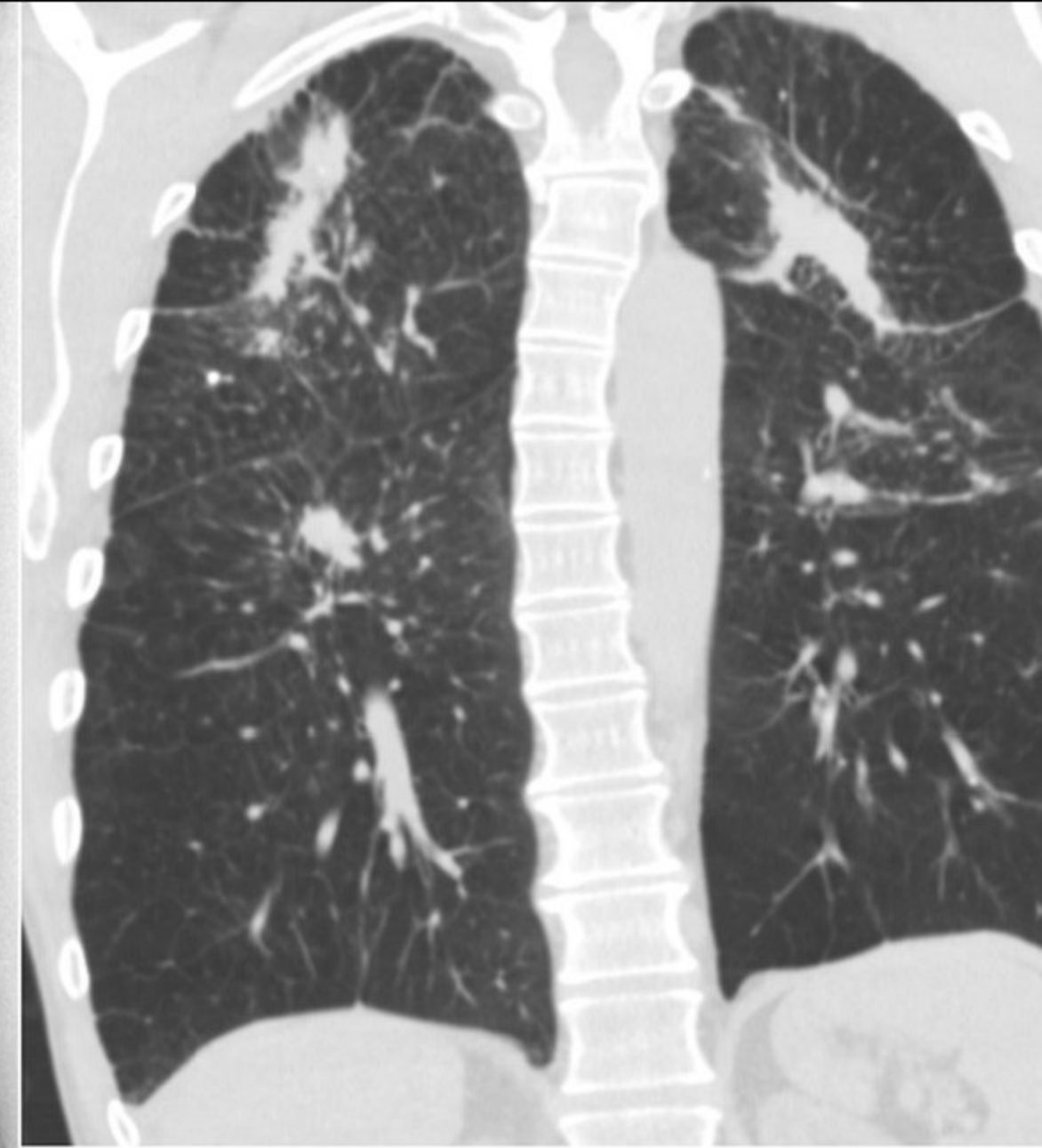
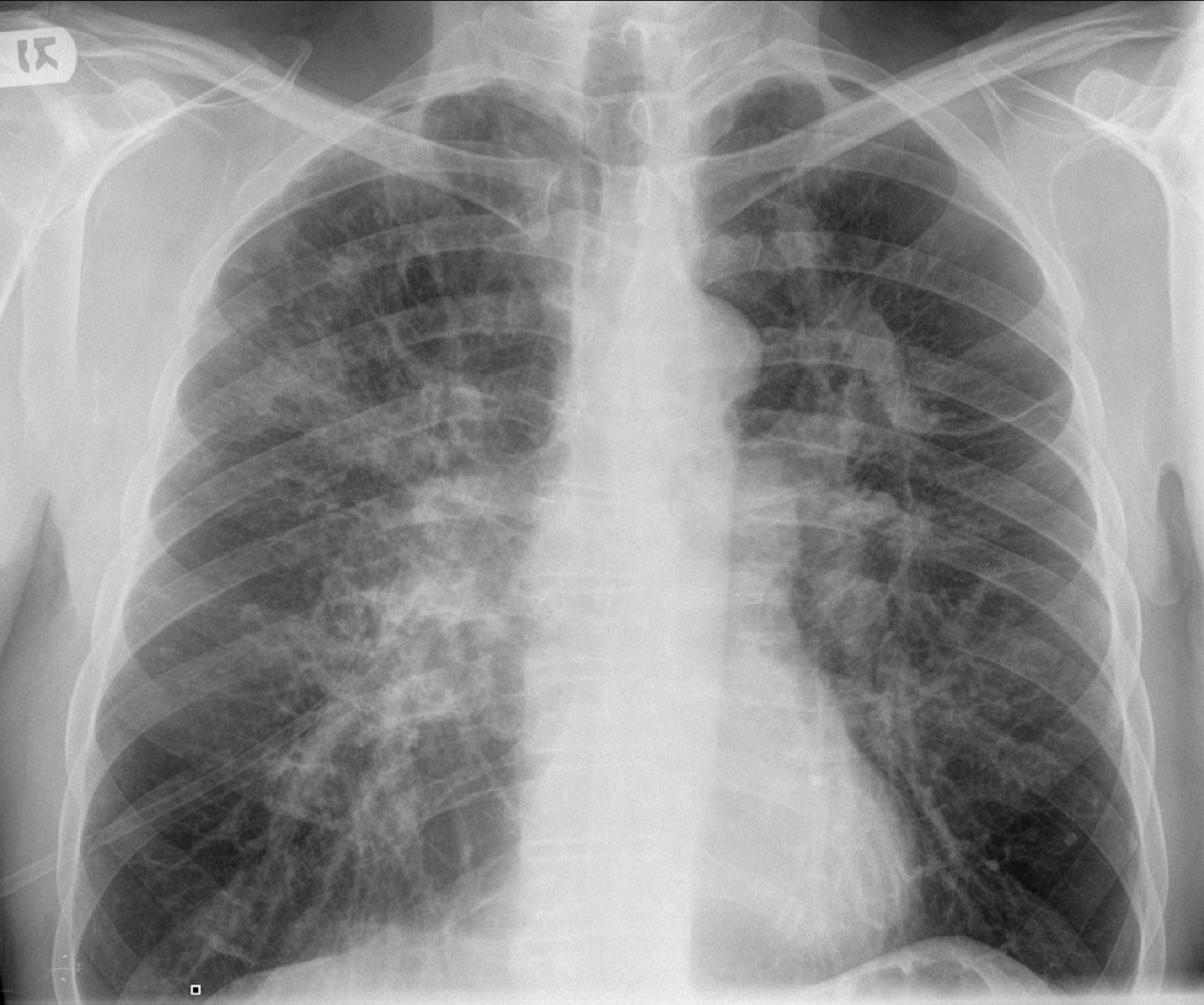


Figure 3: CXR and CT scan of chronic complicated silicosis, or progressive massive fibrosis (PMF) showing nodular lung lesions of one centimeter or greater in diameter, usually in the upper lung zones.



Figure 4: CXR and CT scan of simple CWP showing small rounded opacities.

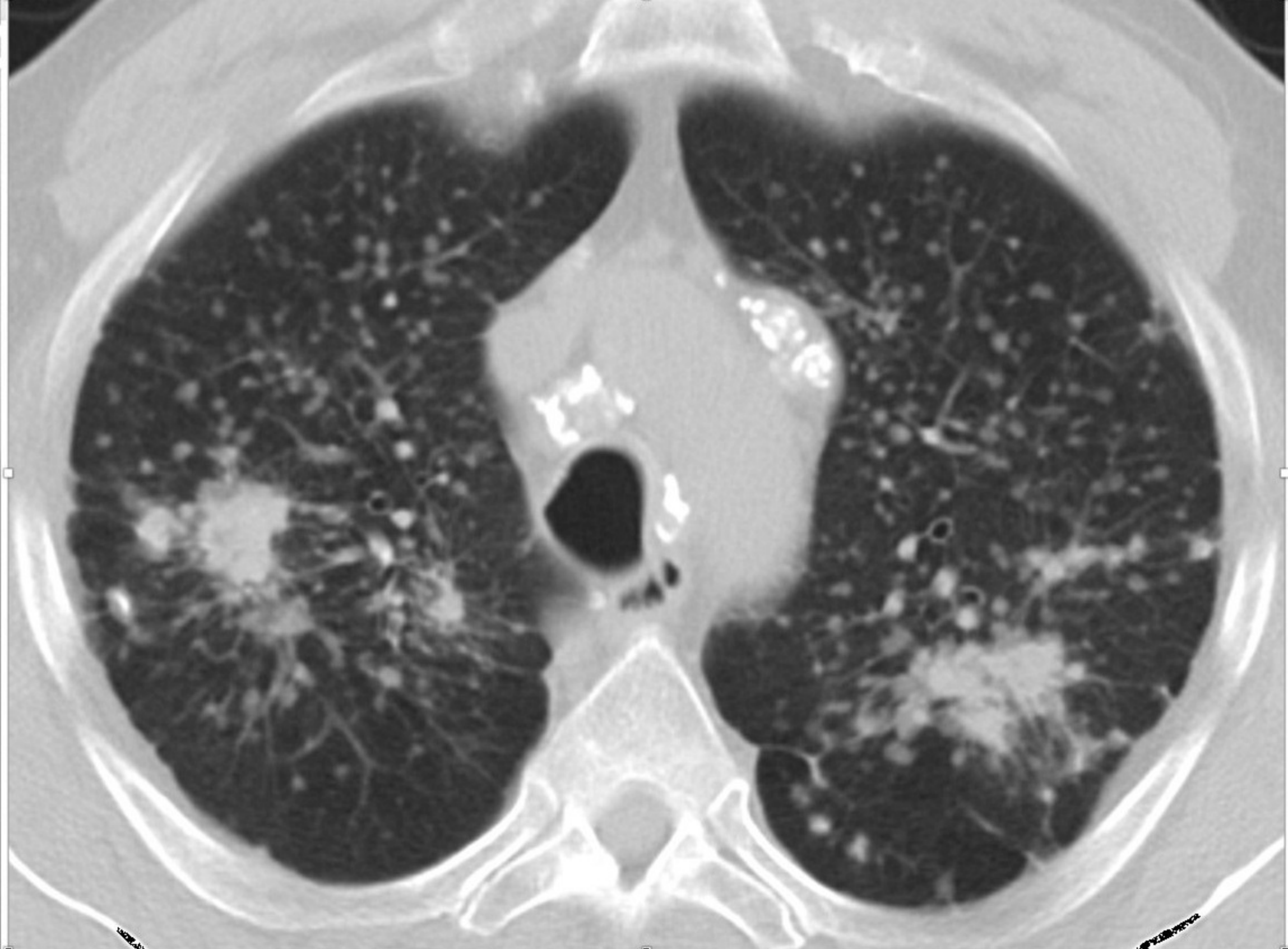


Figure 5: CXR and CT scan of complicated CWP which may appear similar to complicated silicosis. Note the calcifications in the mediastinal lymph nodes. The complicated lesions are seen much more clearly on the CT scan.

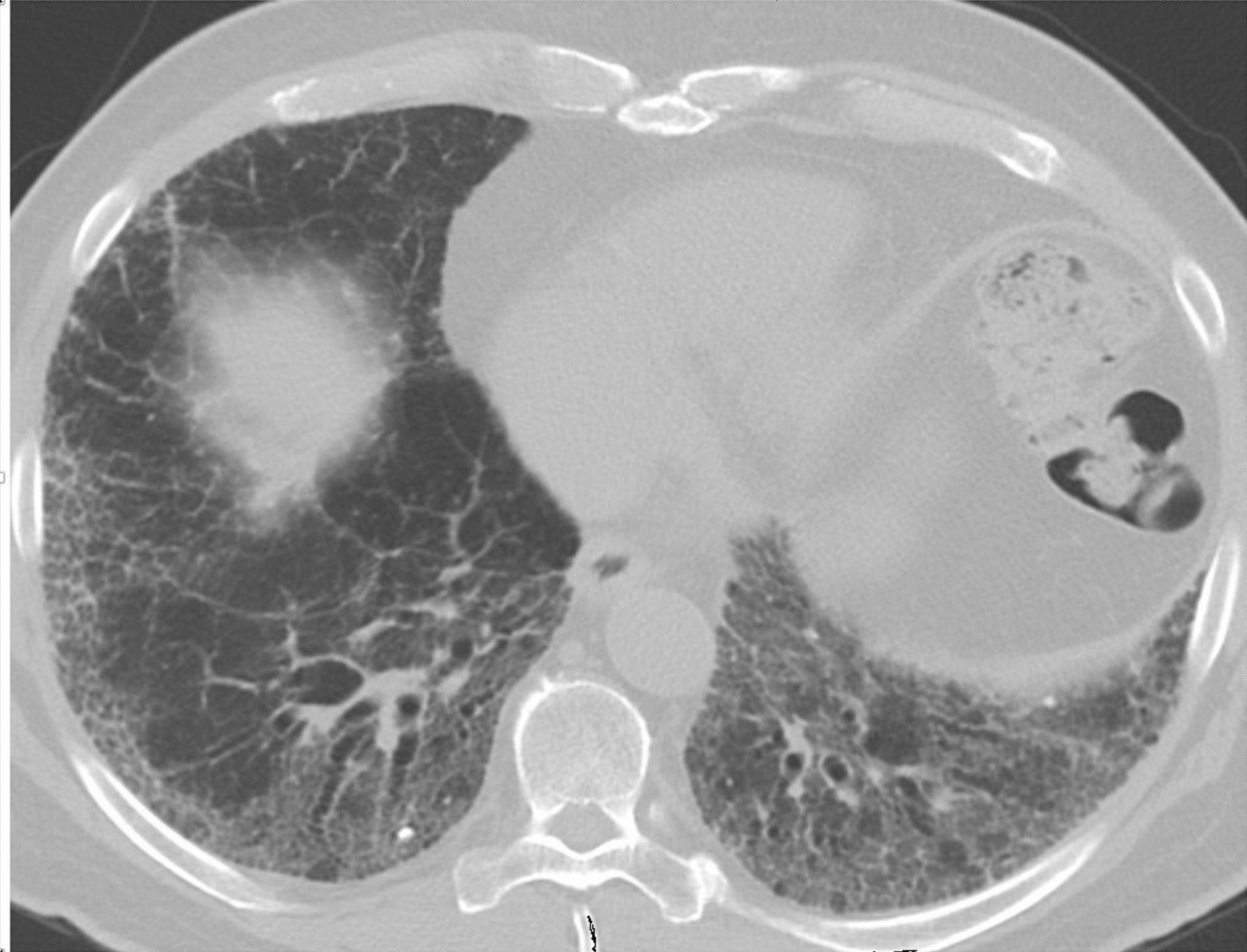


Figure 6: Dust related diffuse fibrosis in a coal miner, characterized by lower lung predominant fibrosis, peripheral subpleural honeycombing, traction bronchiectasis, and ground glass opacities.

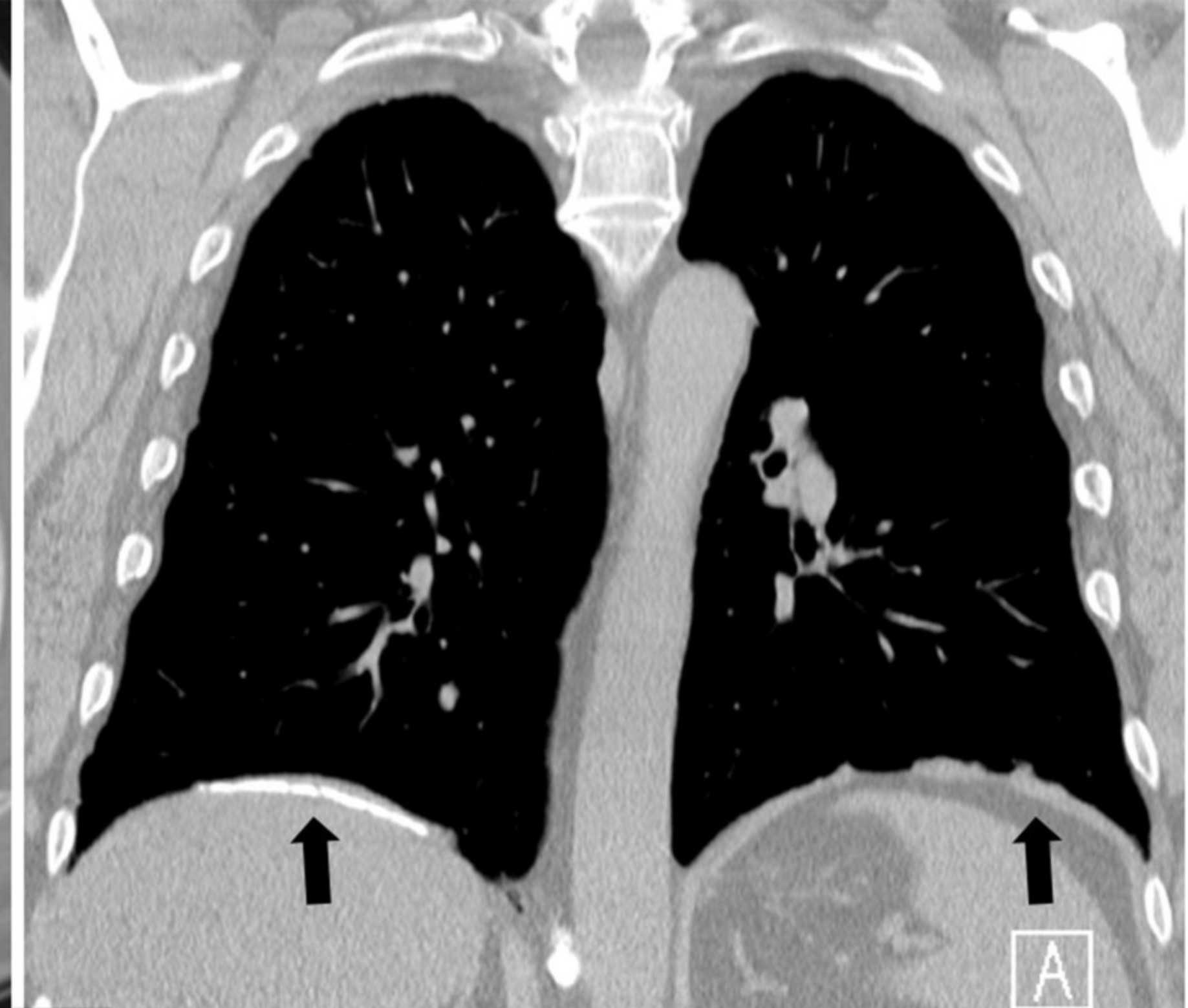
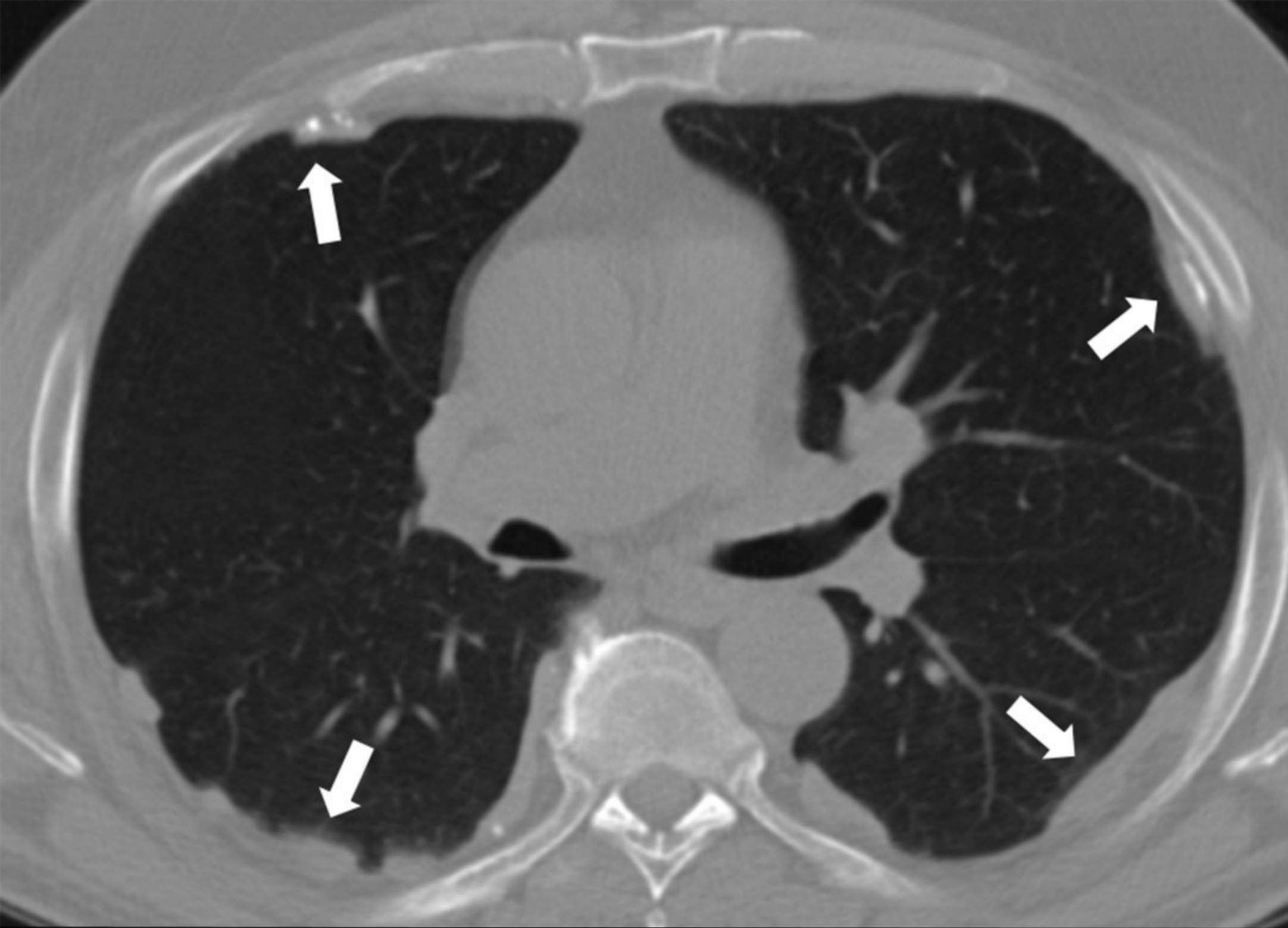


Figure 7: Calcified and noncalcified plaque on parietal pleura (white arrows) and diaphragms (black arrows) bilaterally.

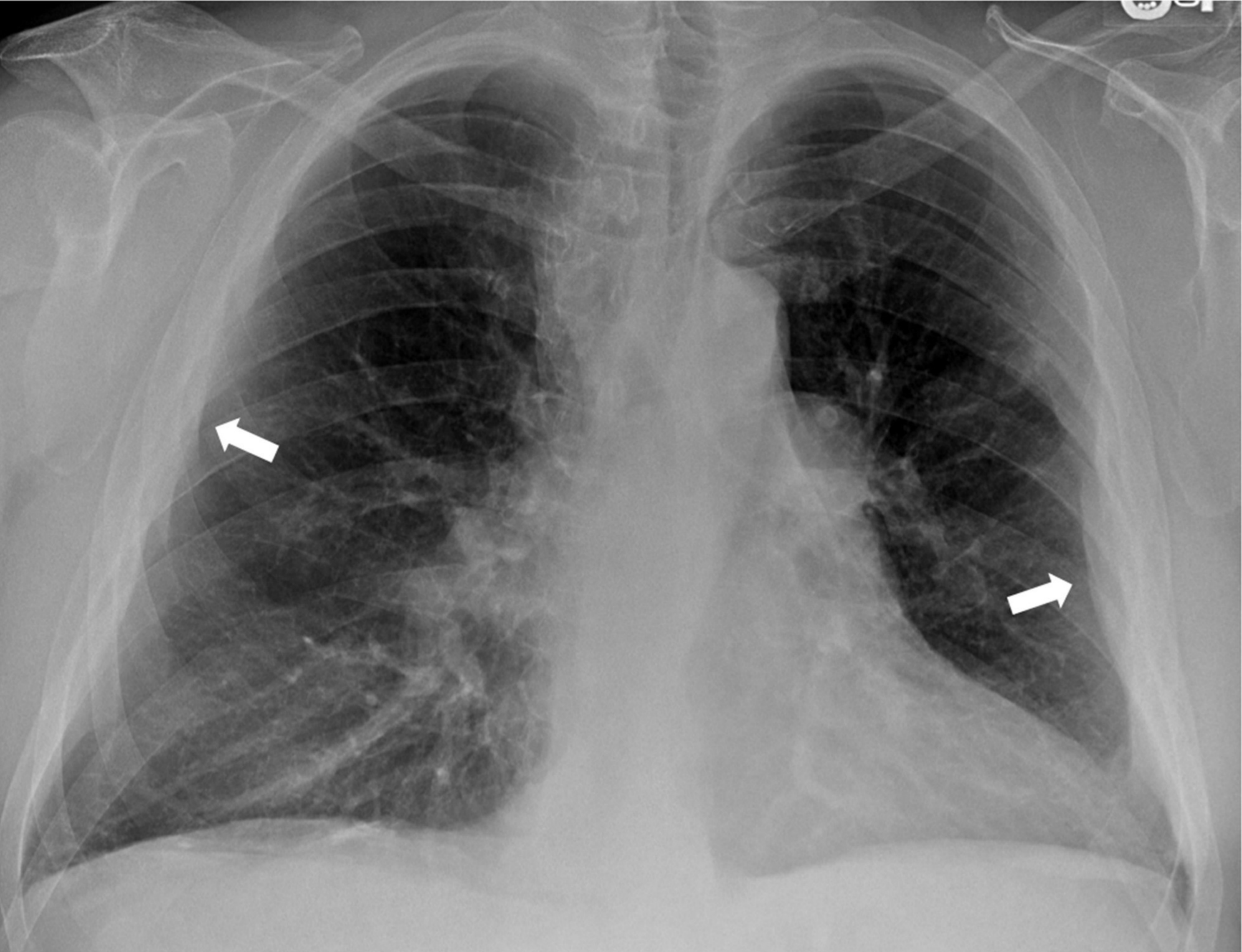


Figure 8: Extrapleural fat, white arrows, characterized by relatively low attenuation soft tissue thickening, extending symmetrically in undulating fashion along the lateral chest wall all the way to the lung apices.

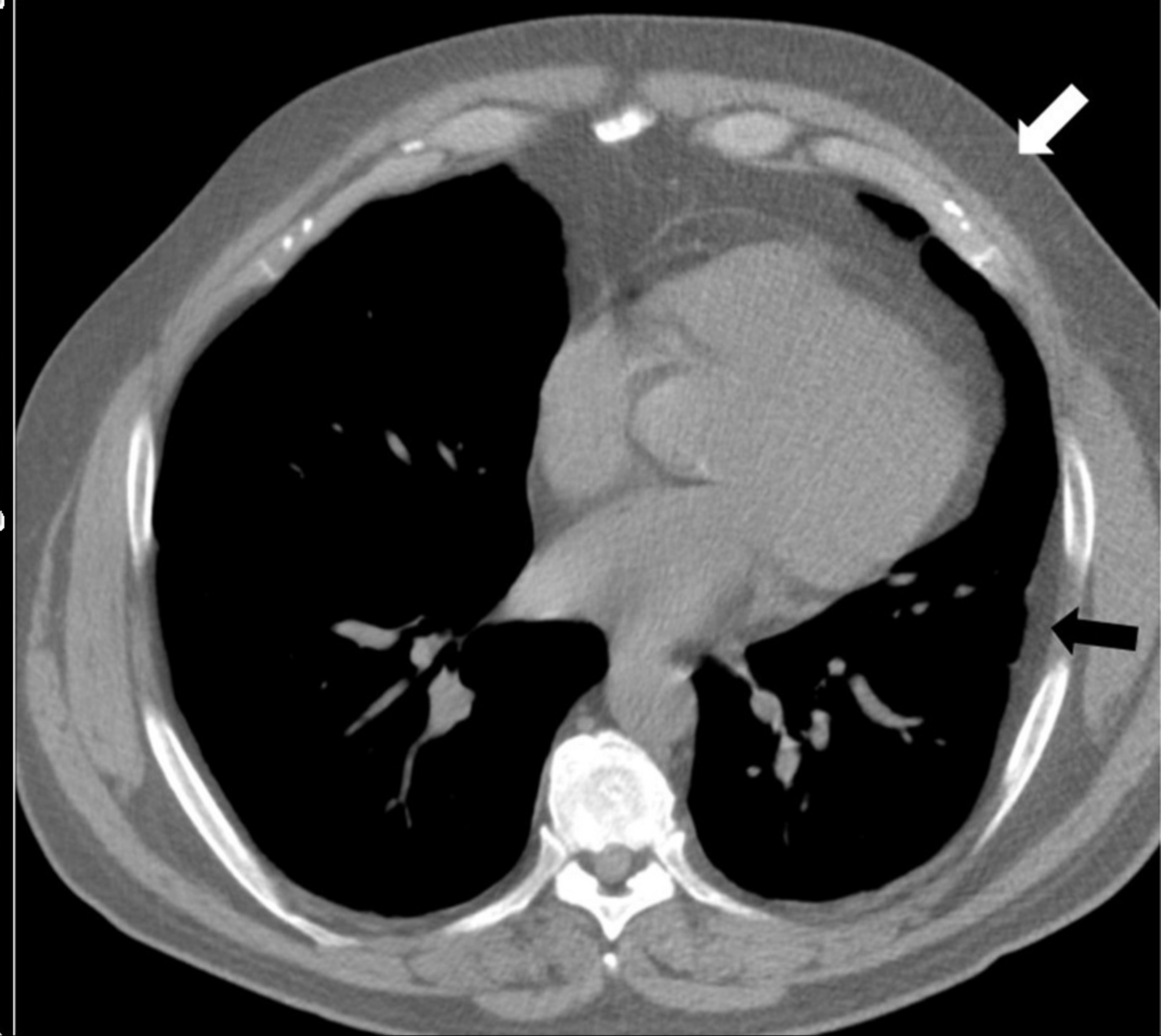


Figure 9: CT scan of the same patient from Figure 8. Note attenuation of pleural thickening (black arrows) similar to subcutaneous fat (white arrow), showing fat attenuation.

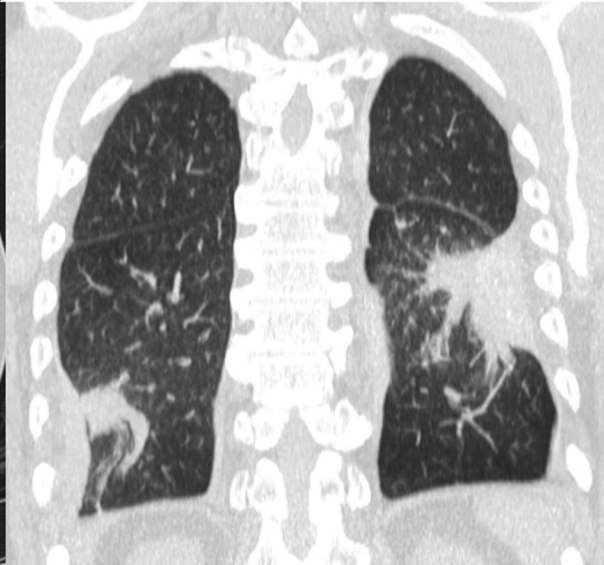
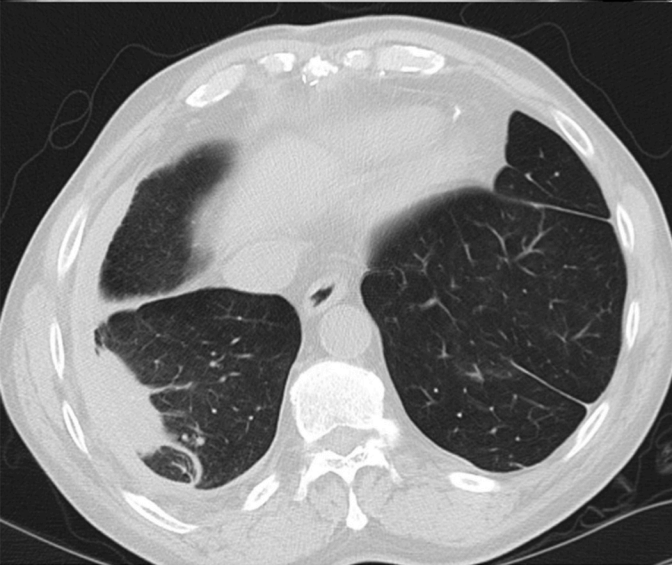
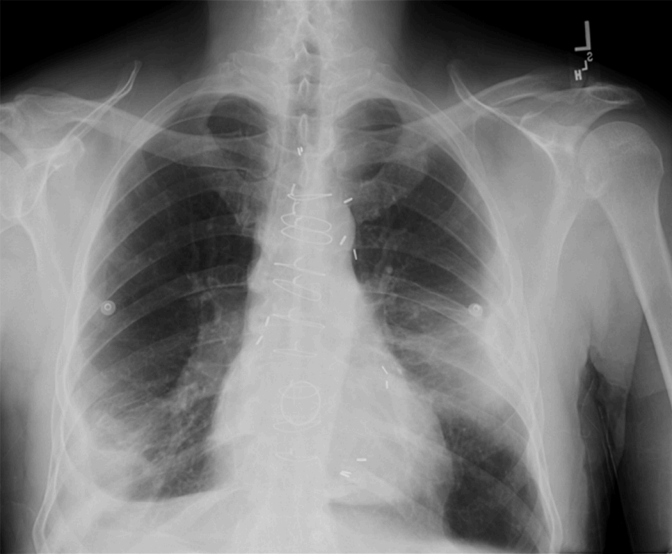


Figure 10: Rounded atelectasis characterized by a mass-like opacity adjacent to thickened pleura, with associated lobar volume loss, and curving of bronchi and vessels into the mass.

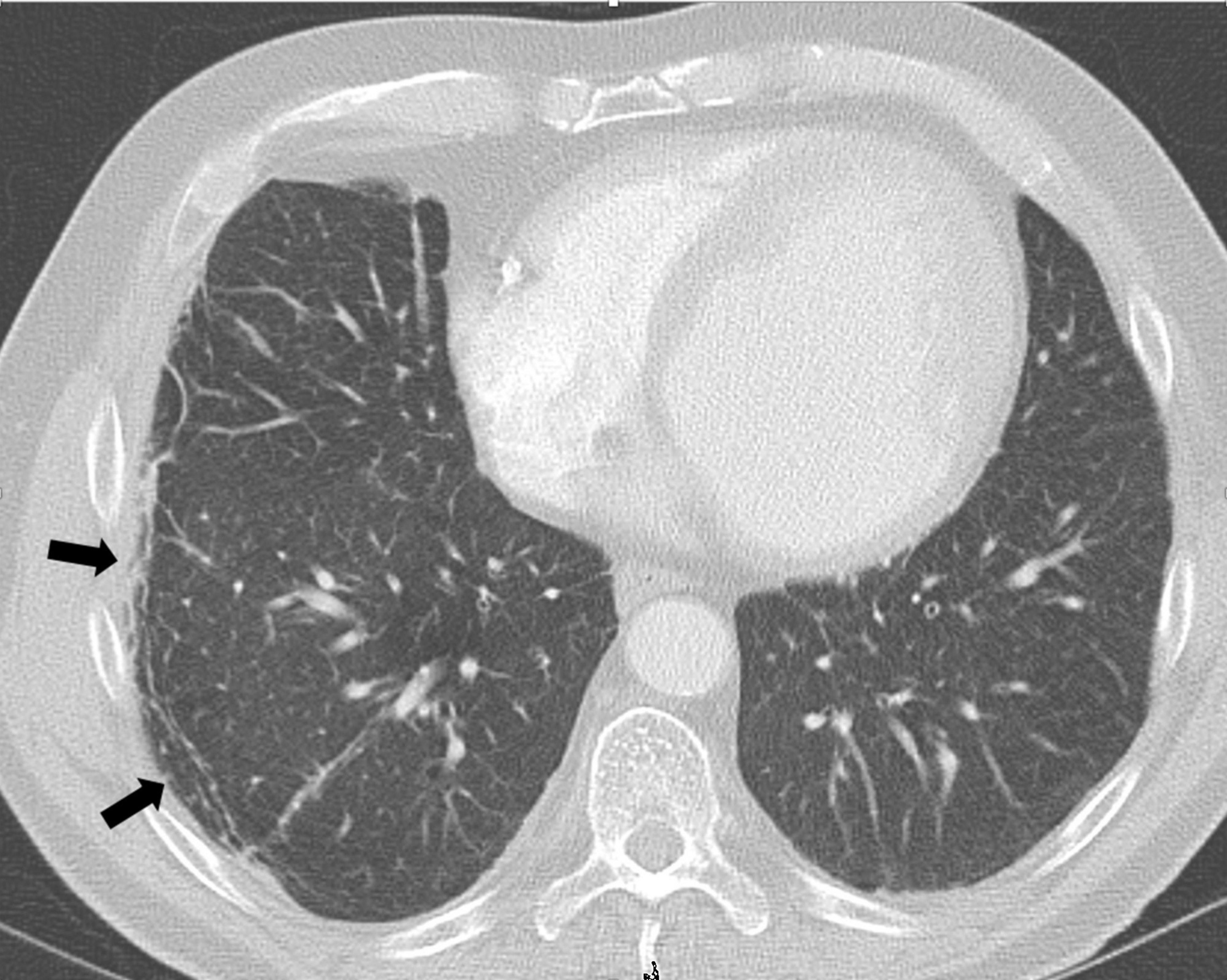


Figure 11: Characteristic HRCT findings of asbestosis including subpleural linear densities; interlobular septal thickening; centrilobular thickening; and subpleural parenchymal bands (Fig. 11, arrow).

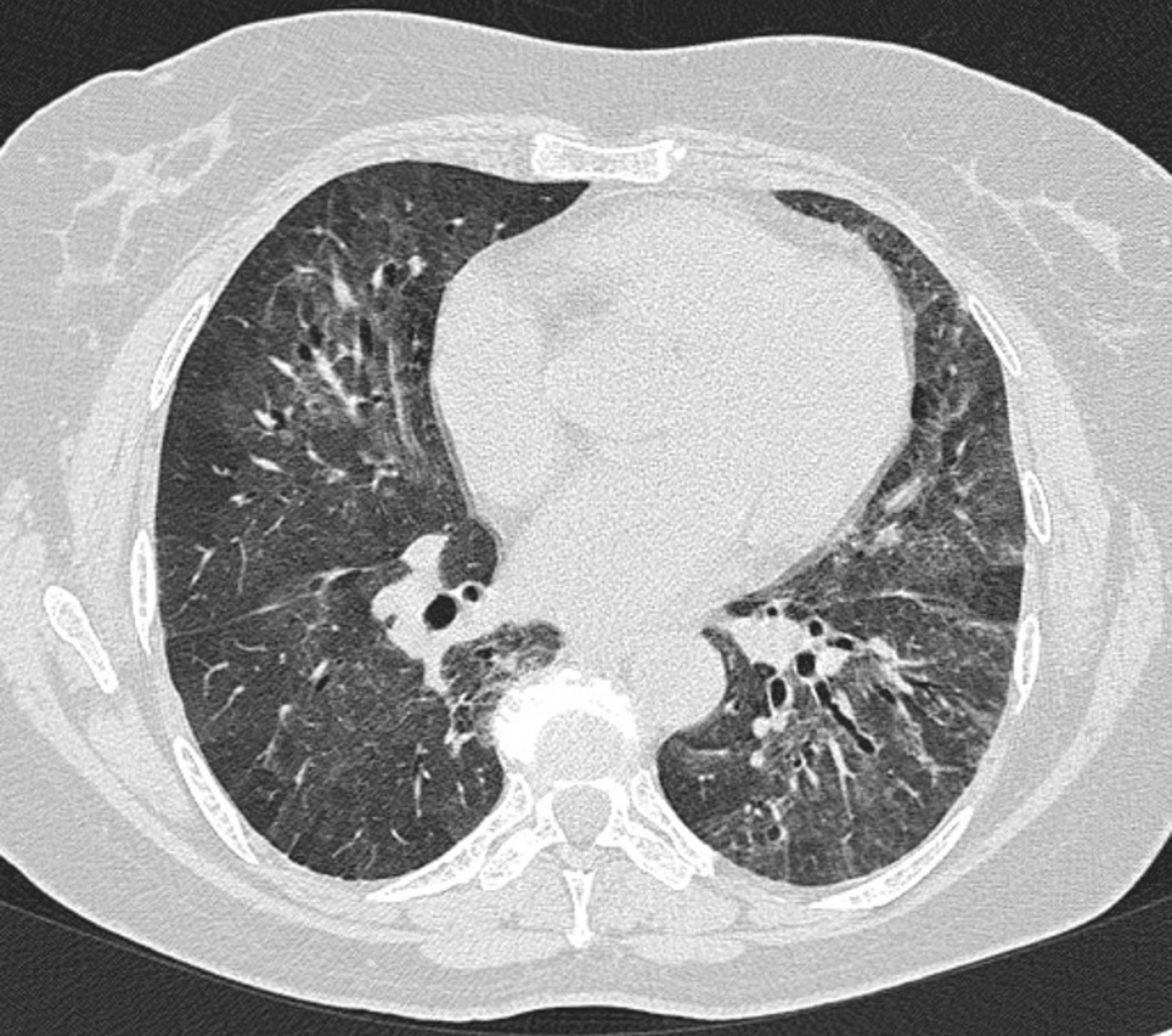


Figure 12: Hypersensitivity pneumonitis showing features of ground glass opacity, traction bronchiectasis, and mosaic attenuation.

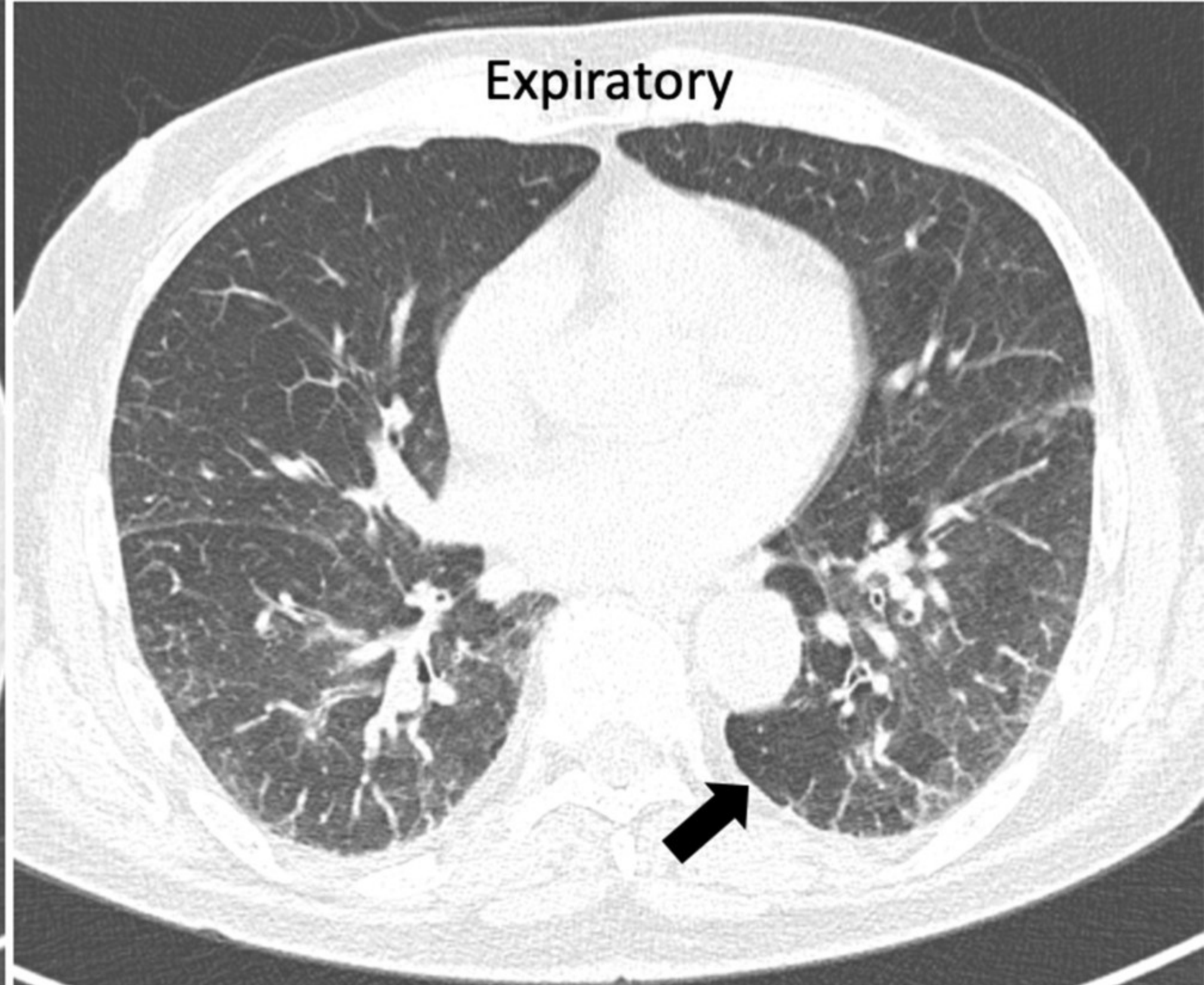
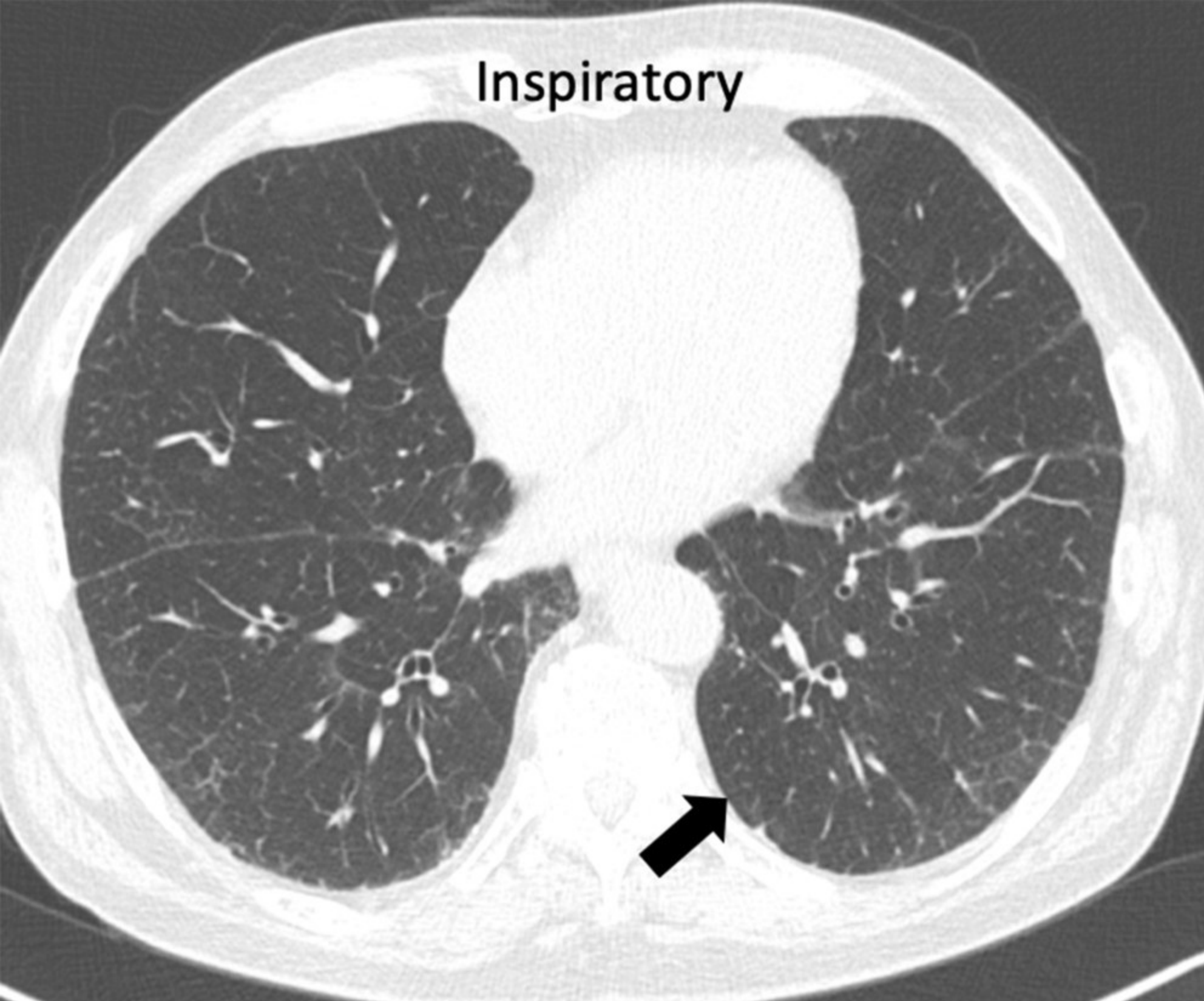


Figure 13: Demonstrates air trapping at arrows, subtle nodular changes and ground glass opacities.

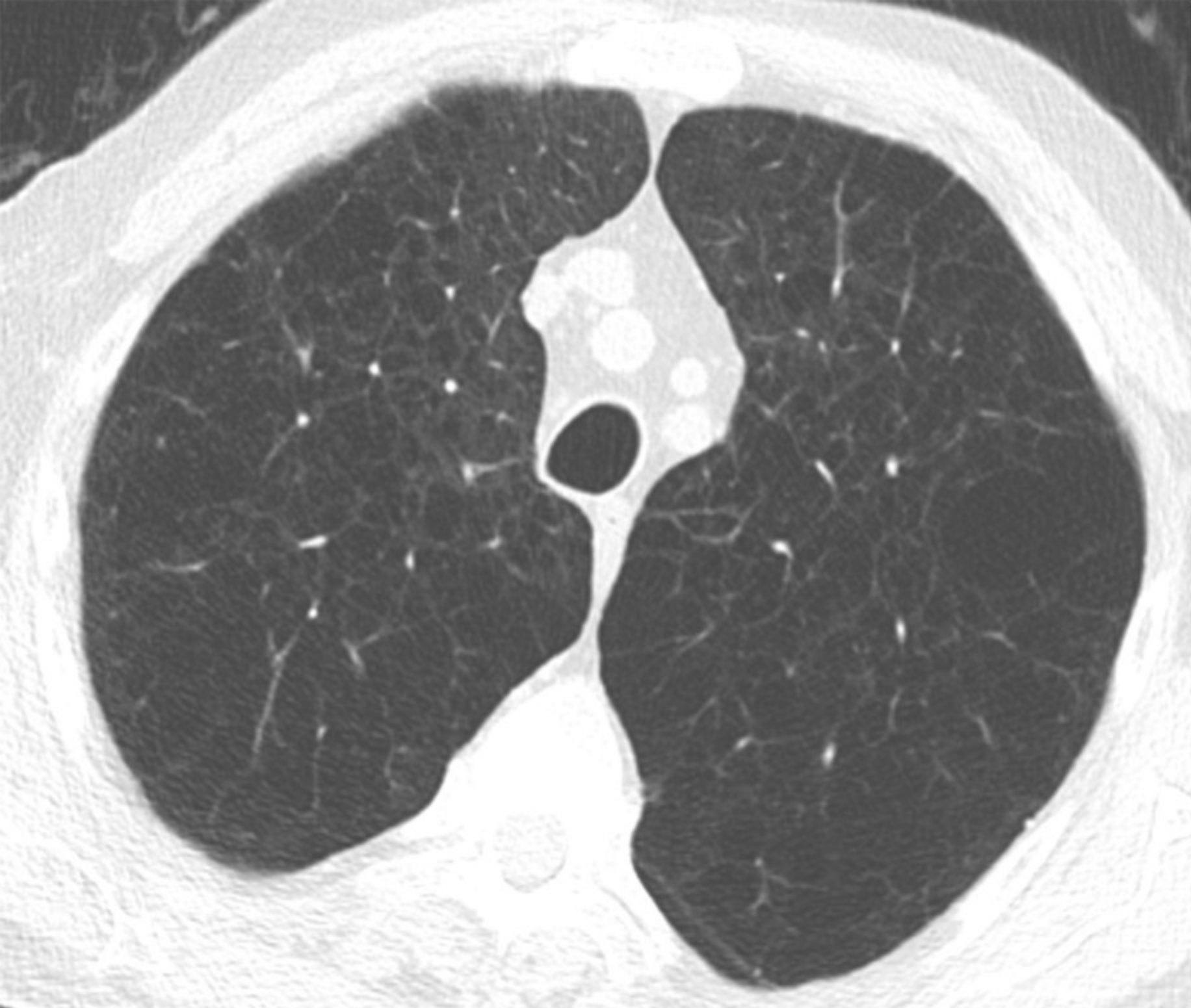


Figure 14: Emphysema in a patient with chronic HP.

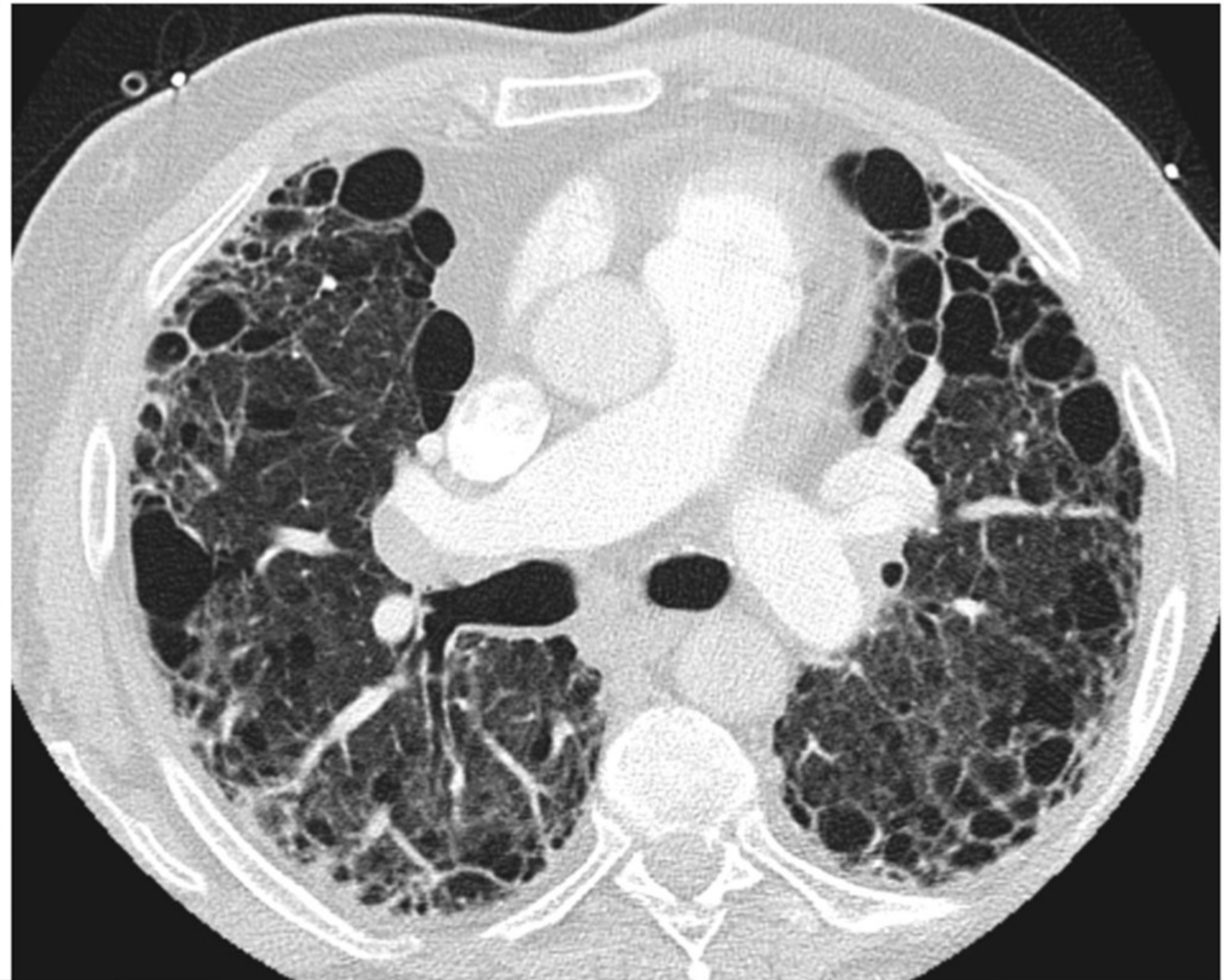
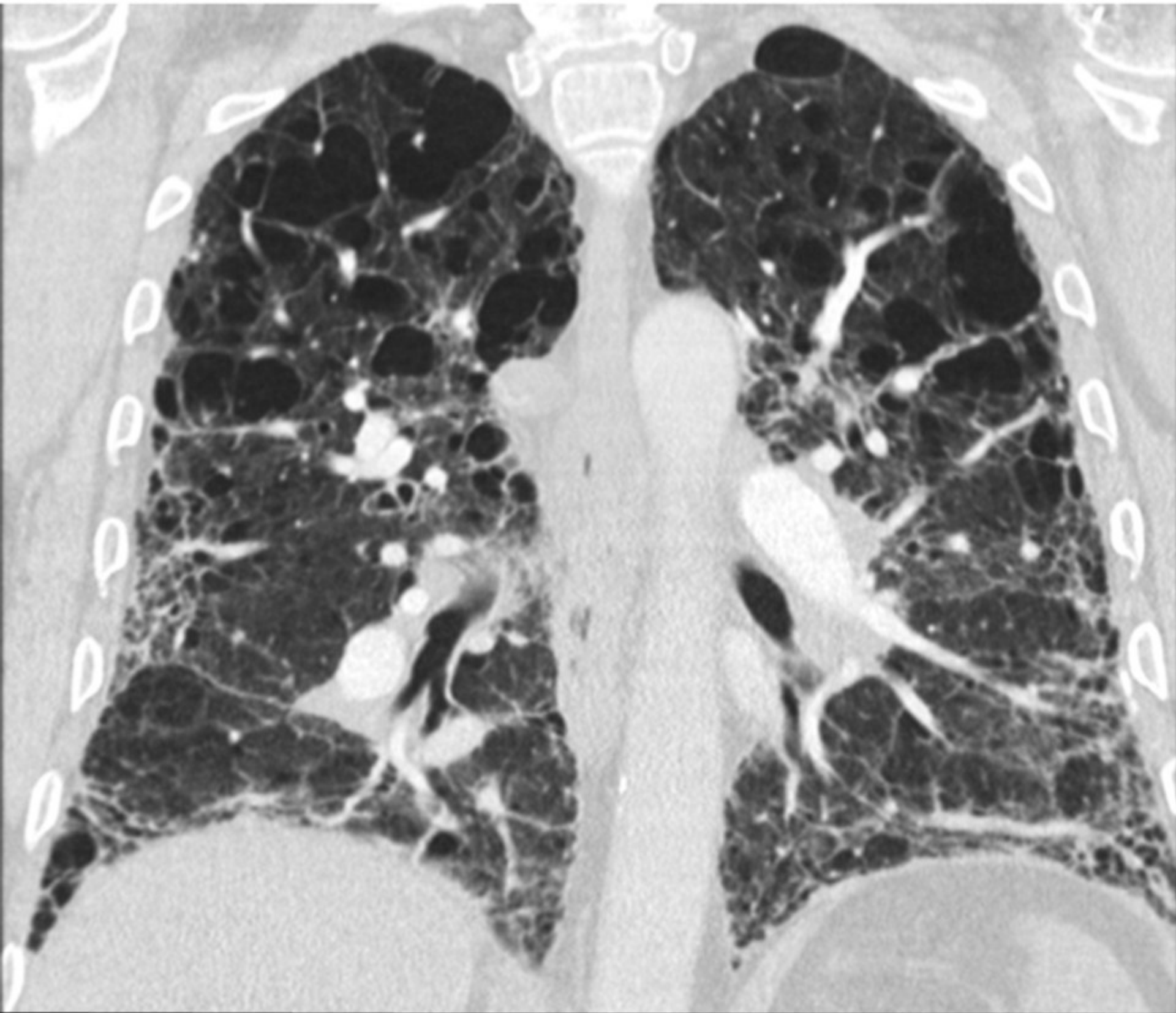


Figure 15: Cystic changes in a patient with chronic HP.

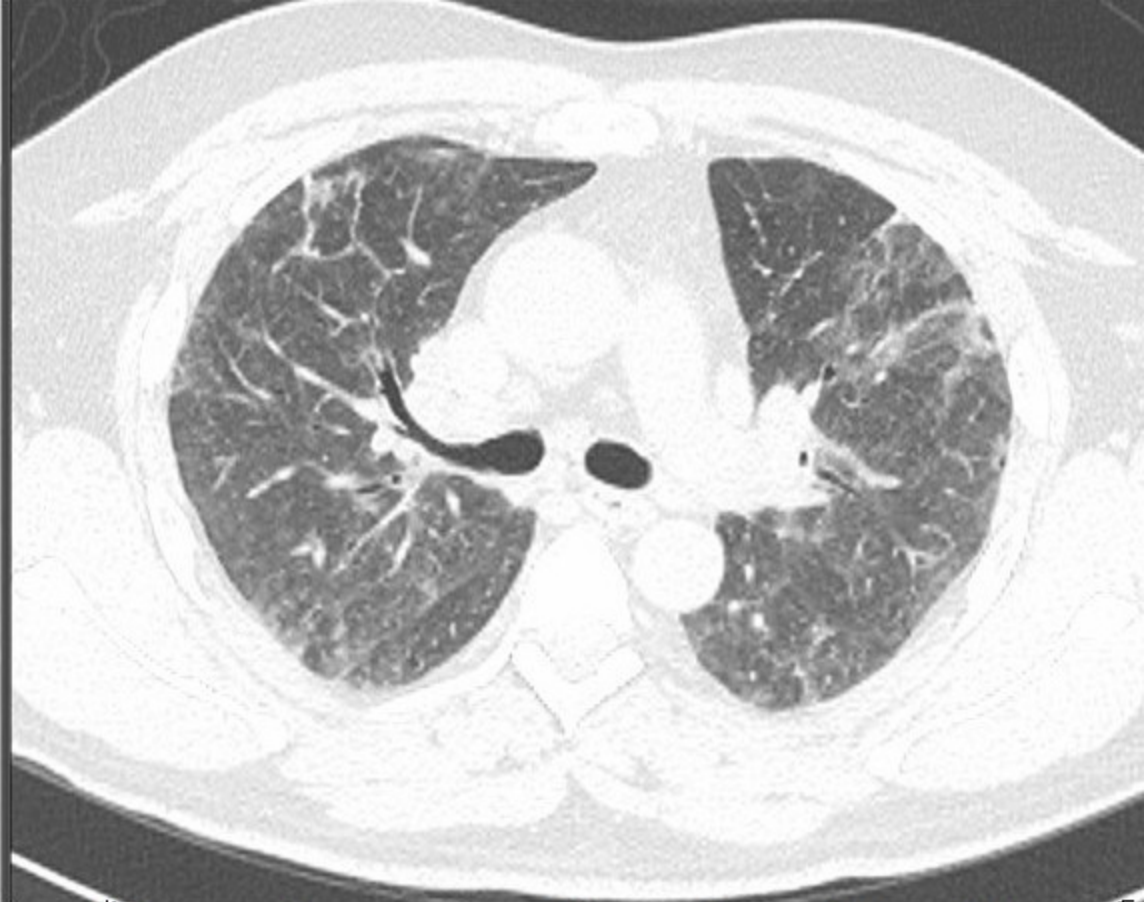


Figure 16: Patient with chronic beryllium disease showing fibrotic linear opacities and loss of volume.

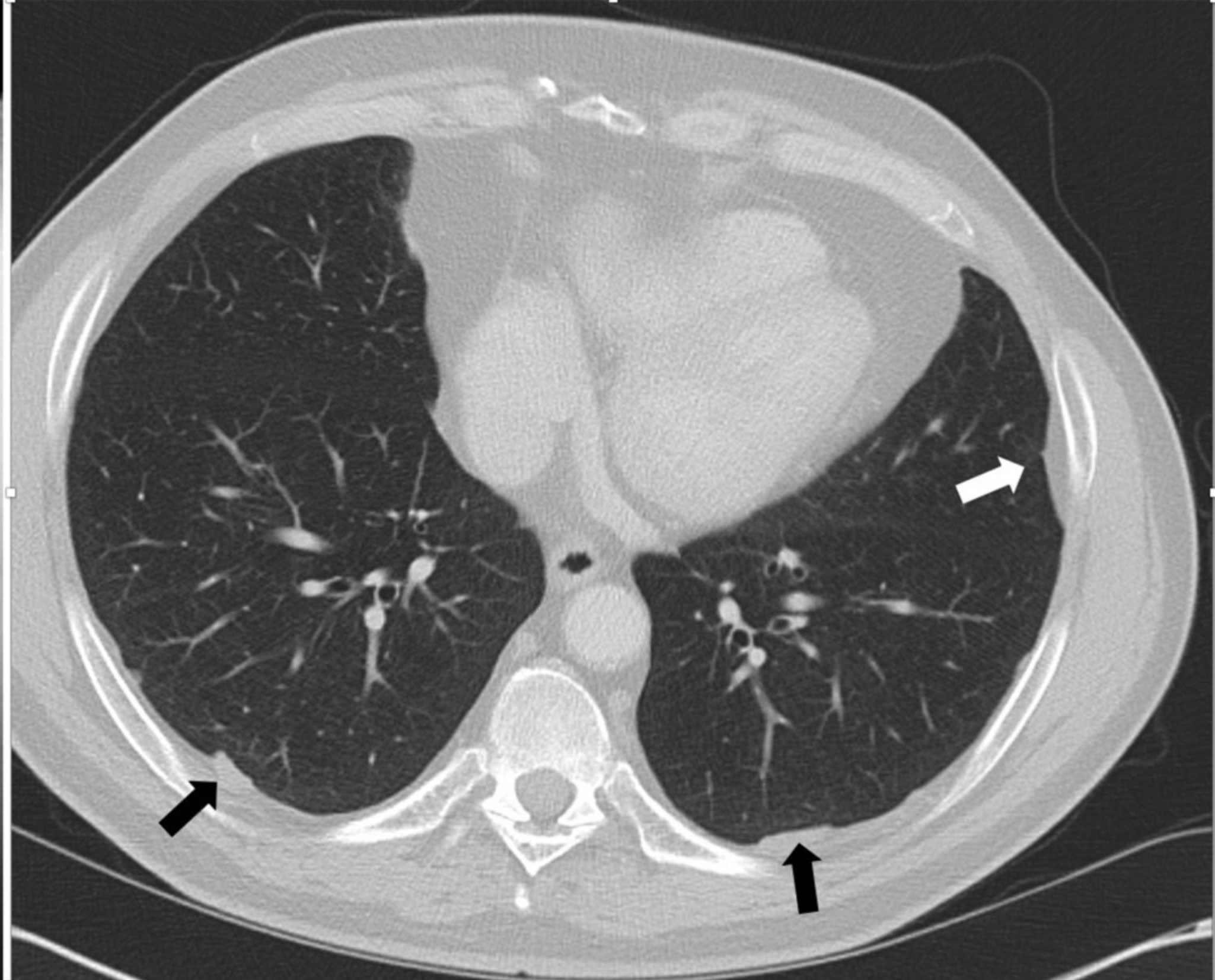
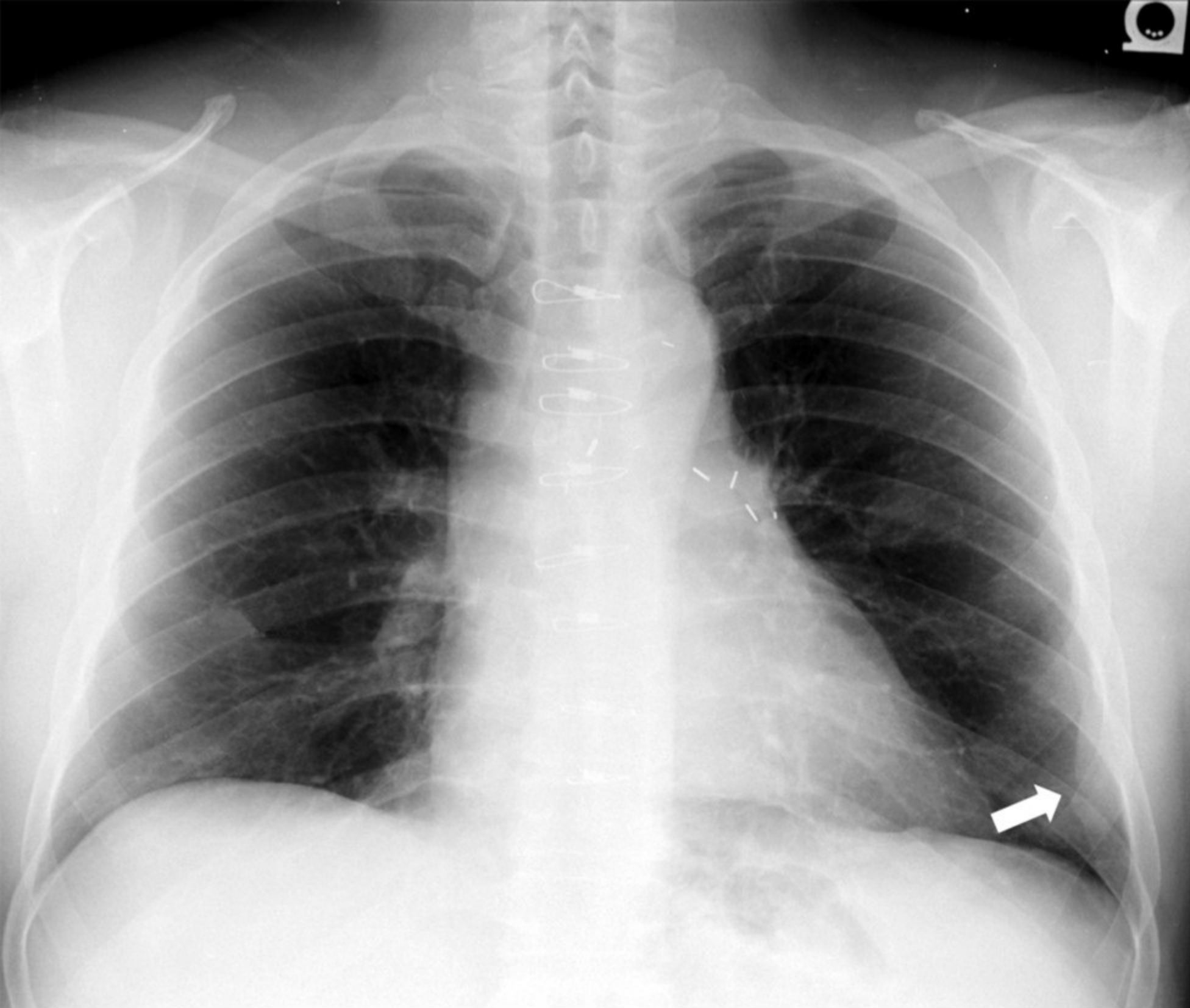


Figure 18: Demonstrates pleural thickening at the left base on chest radiograph (white arrow); CT image showing pleural plaque (black arrows) not visible on the chest radiograph, while apparent pleural plaque at the left base on chest radiograph is shown to represent subpleural fat (white arrow).

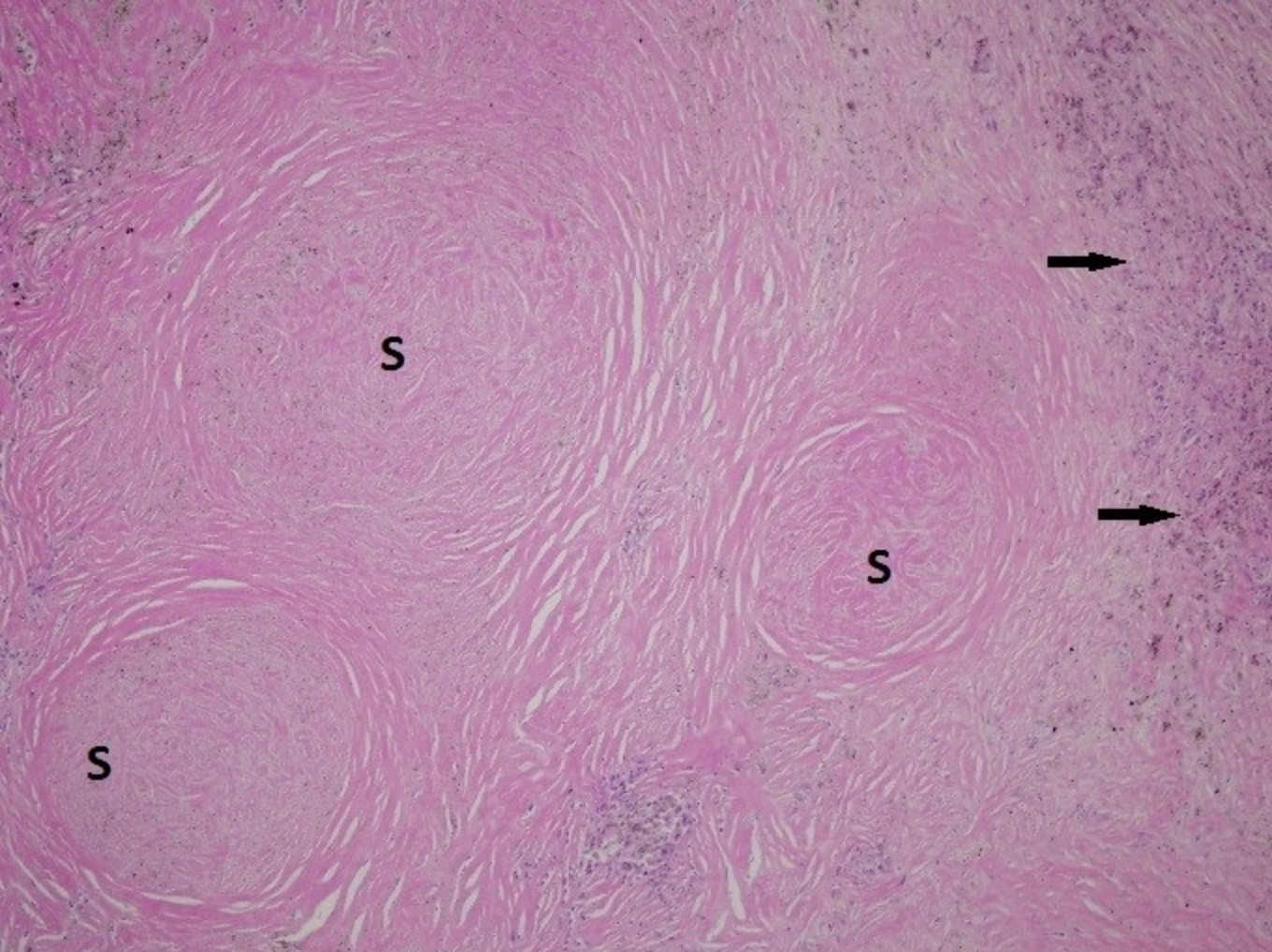


Figure 19: Coalescent fused silicotic nodules (S) having a whorled, hyalinized appearance. Dust-laden macrophages (arrows) are present around the periphery of the lesion.

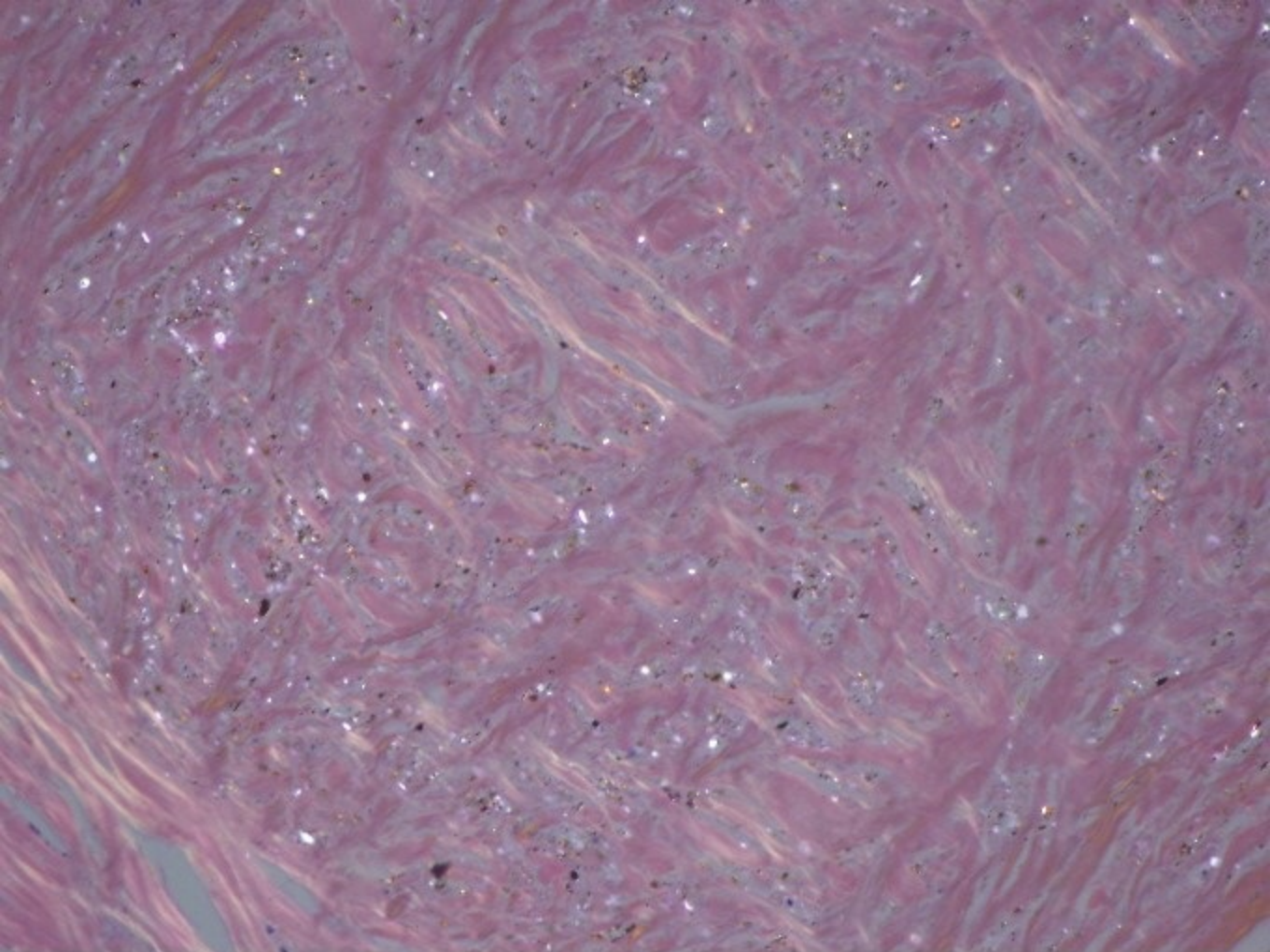


Figure 20: Birefringent polyhedral silica particles are dispersed throughout the silicotic nodule. Silica particles appear white in this polarized image (polarized light).

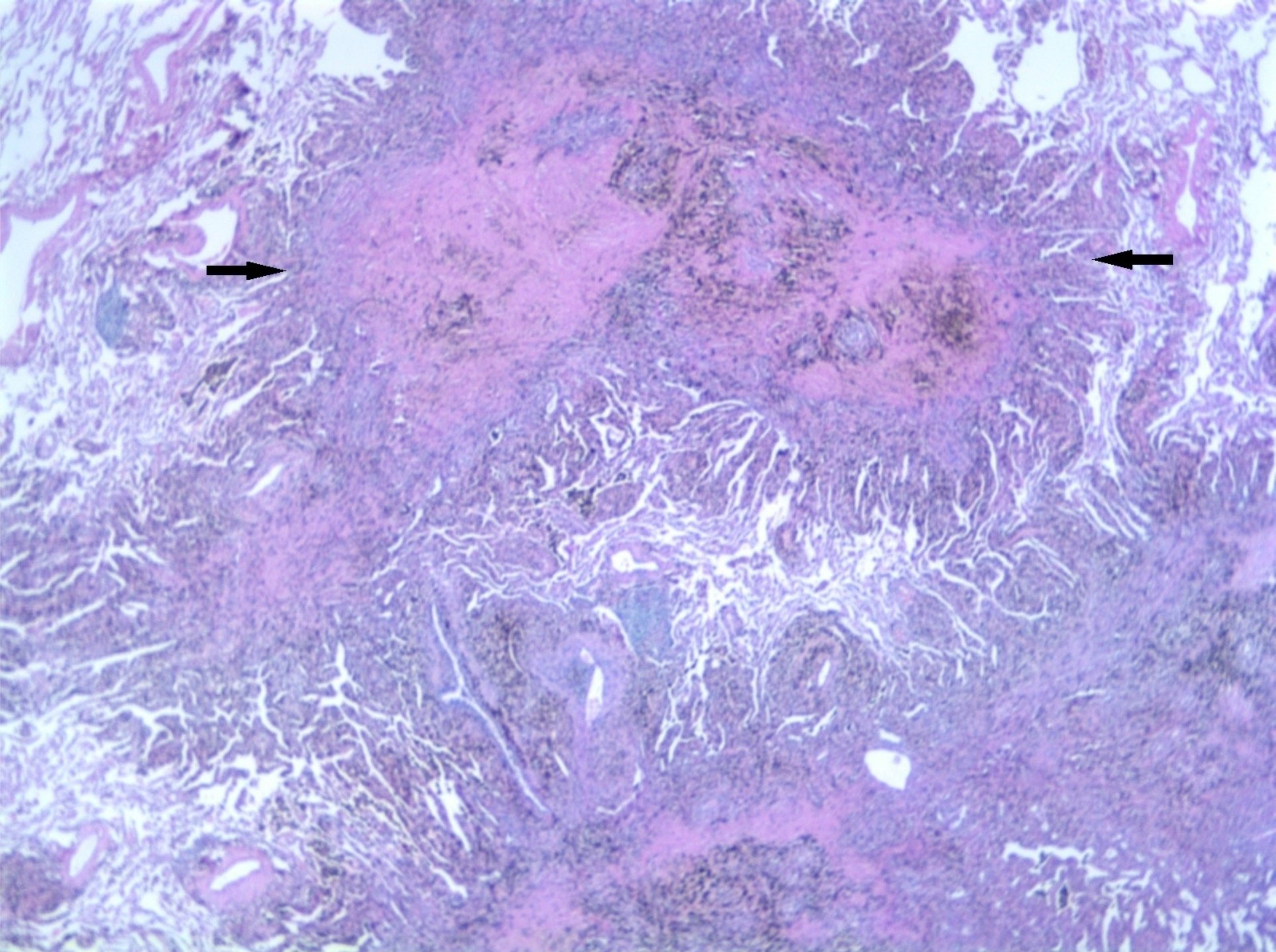


Figure 21: Coalescent mixed-dust stellate nodules (between arrows) in a miner with simple coal worker's pneumoconiosis.

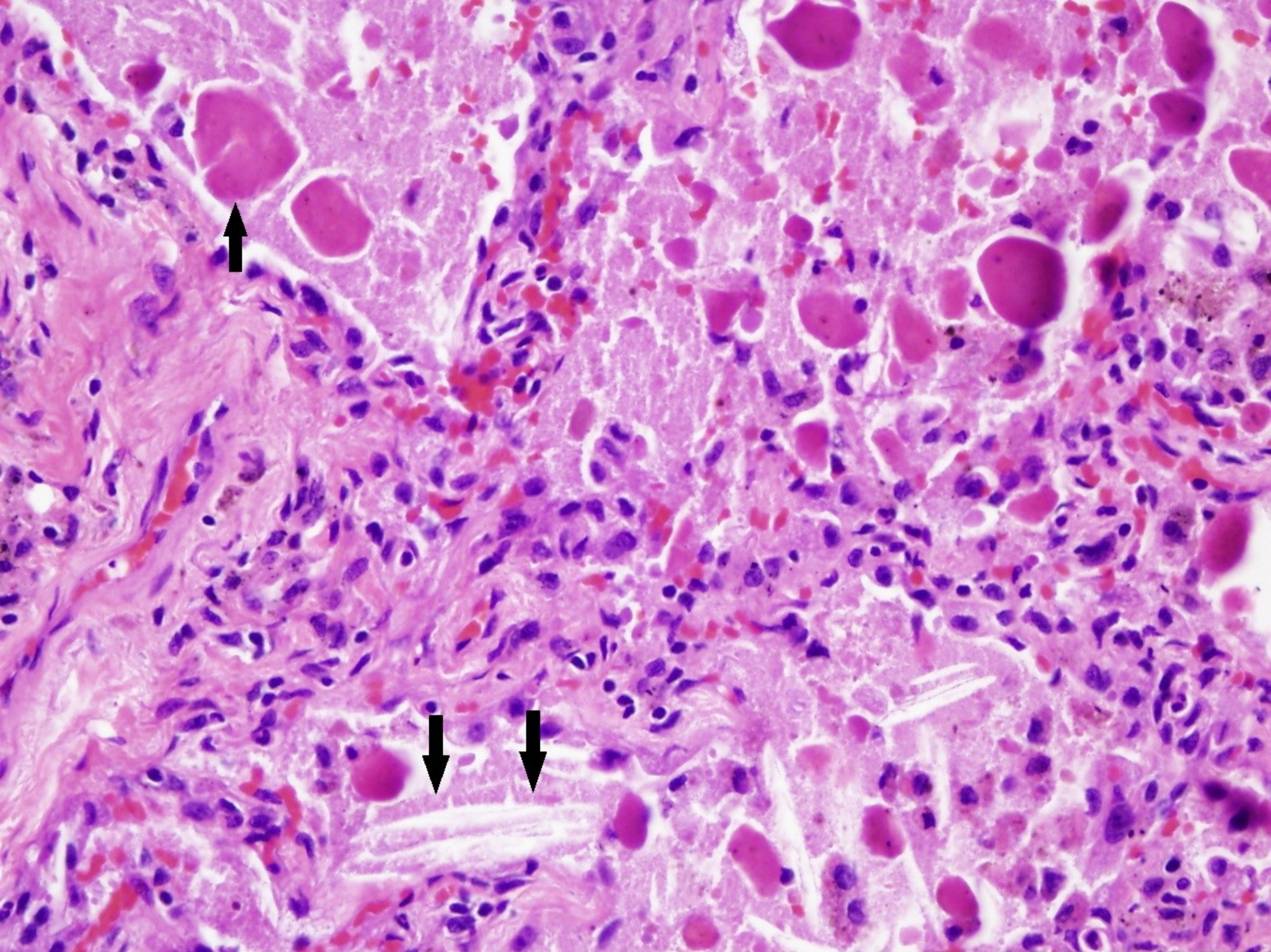


Figure 22: Acute silicosis. Alveoli are filled with granular eosinophilic material with large globules (single arrow) and cholesterol clefts (double arrow) indicative of alveolar proteinosis. Silicotic nodules are inconspicuous.

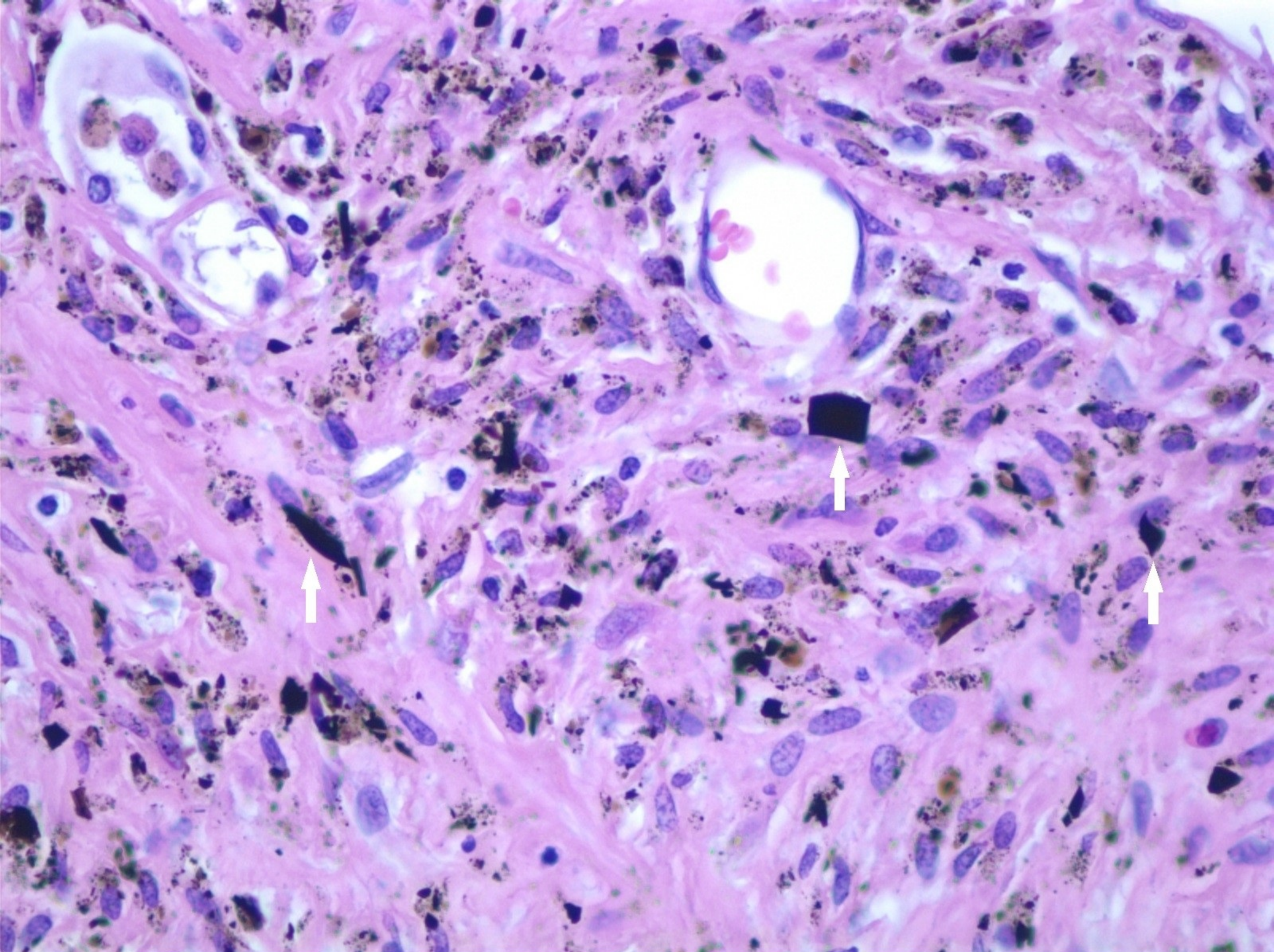


Figure 23: Fine and coarse (arrows) angulated black coal particles in a nodular lesion of coal workers' pneumoconiosis.

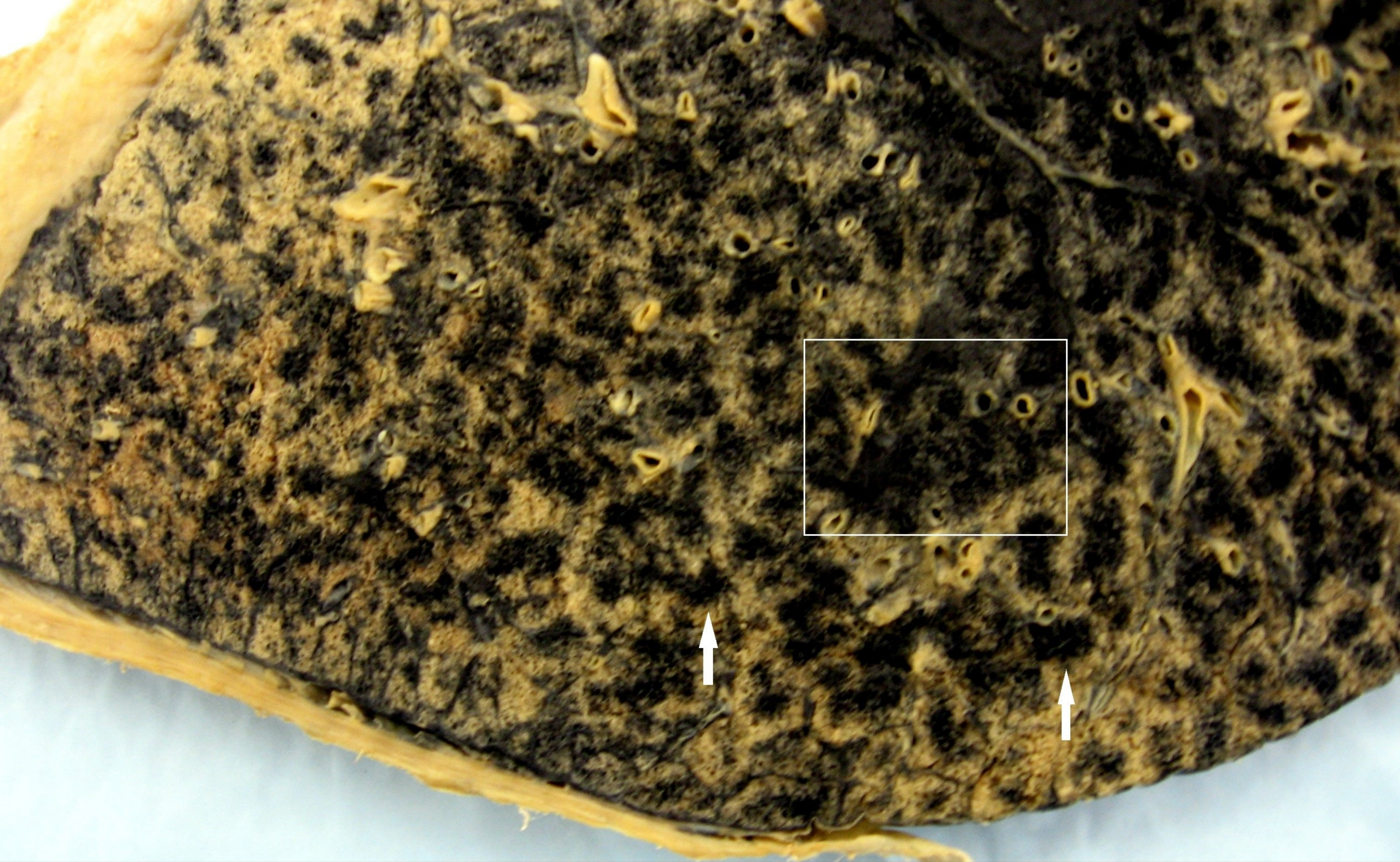


Figure 24: Simple coal workers' pneumoconiosis. Coal macules appear as black irregular pigment deposits. Discrete (arrows) and coalescent (within rectangle) macules are seen.

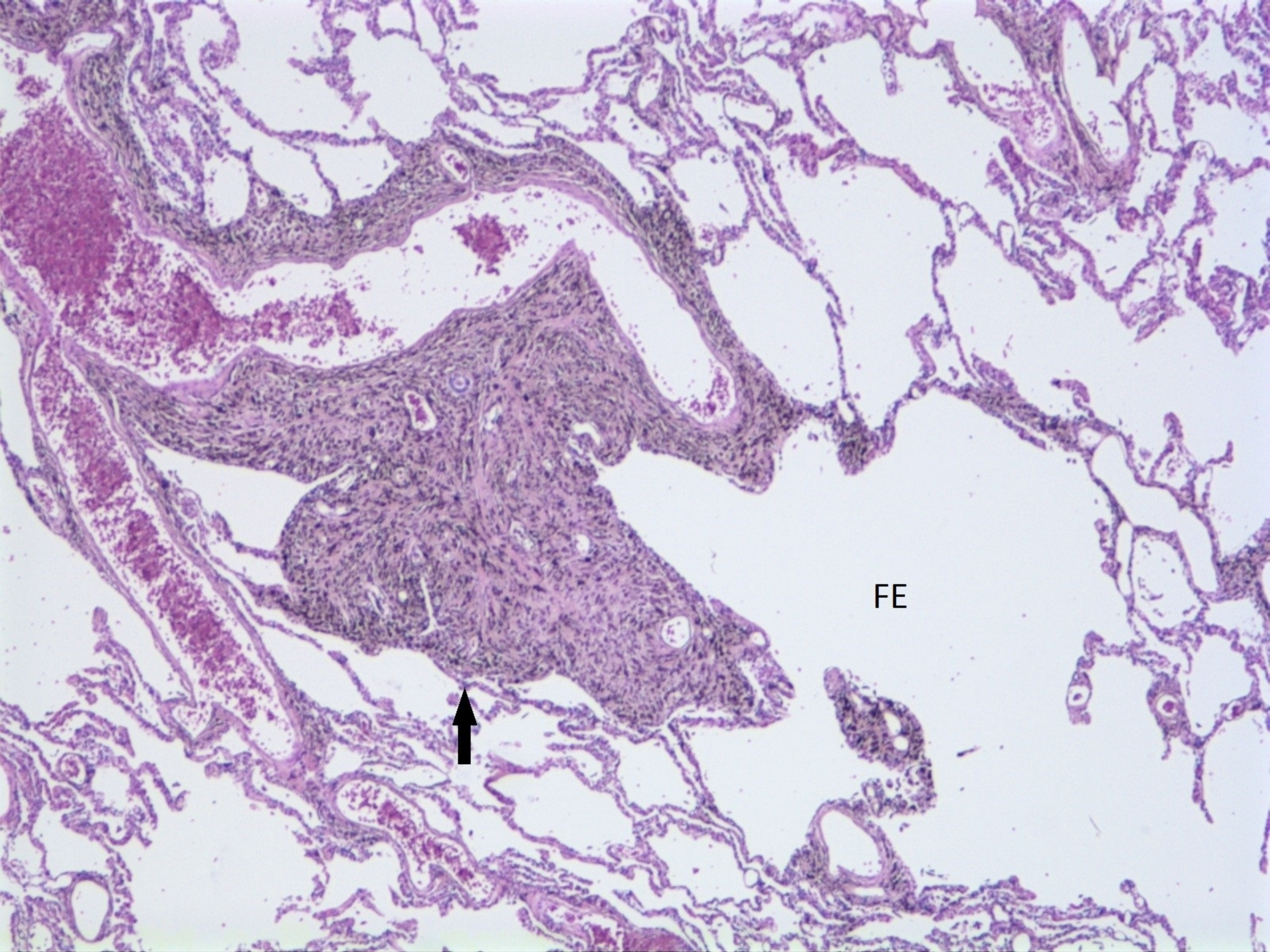


Figure 25: Airspace dilatation around the macule, termed focal emphysema (FE), is an integral component of the lesion and is considered to represent a form of centrilobular emphysema.

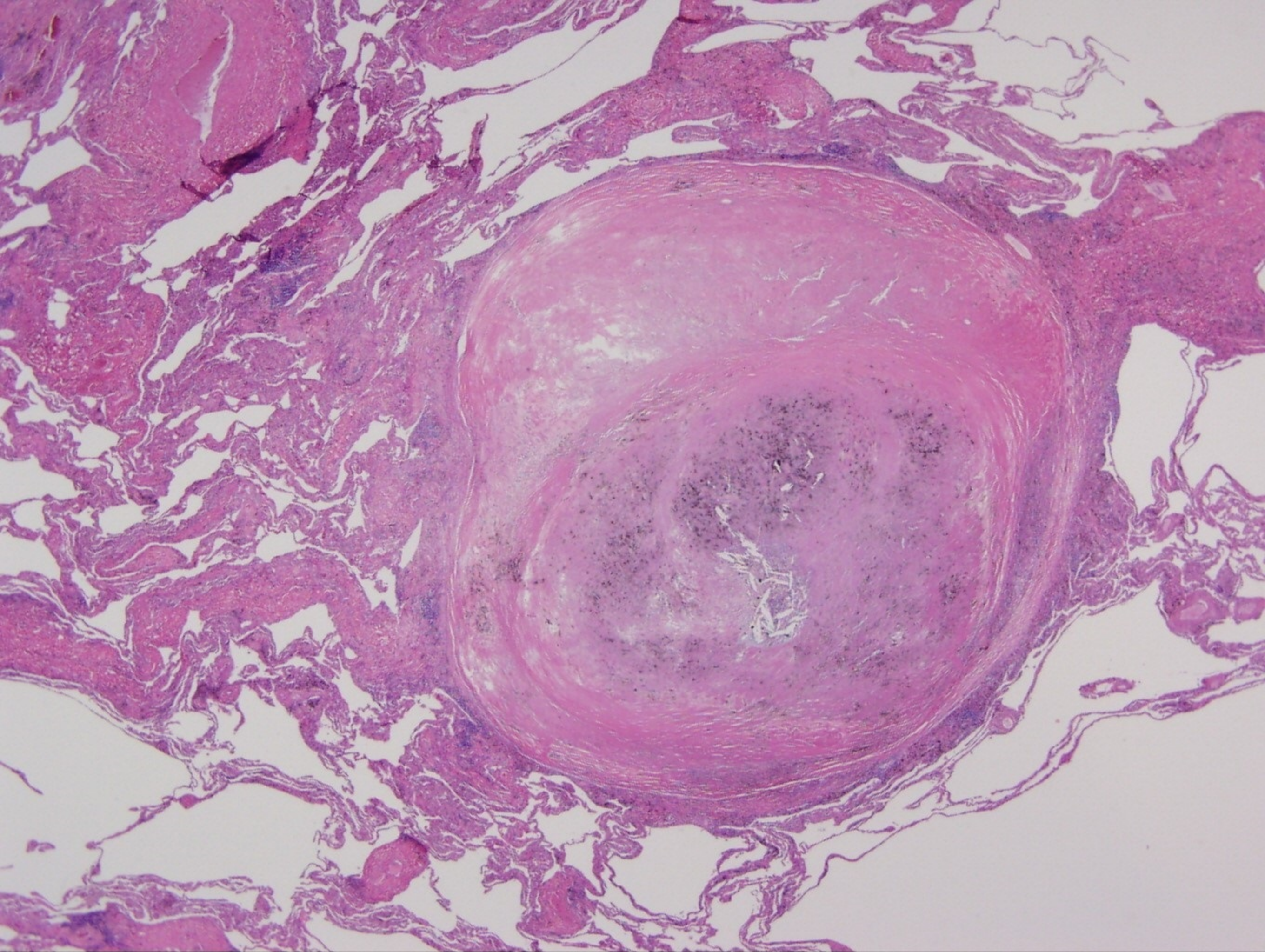


Figure 26: Simple CWP appear pathologically as rounded nodules with pigment and may resemble silicotic nodules.



Figure 27: Progressive massive fibrosis. A large nodular lesion of progressive massive fibrosis (arrow) occupies the upper lobe and extends across the diagonal fissure (arrowheads). There is a background of simple coal worker's pneumoconiosis (highlighted in rectangle).

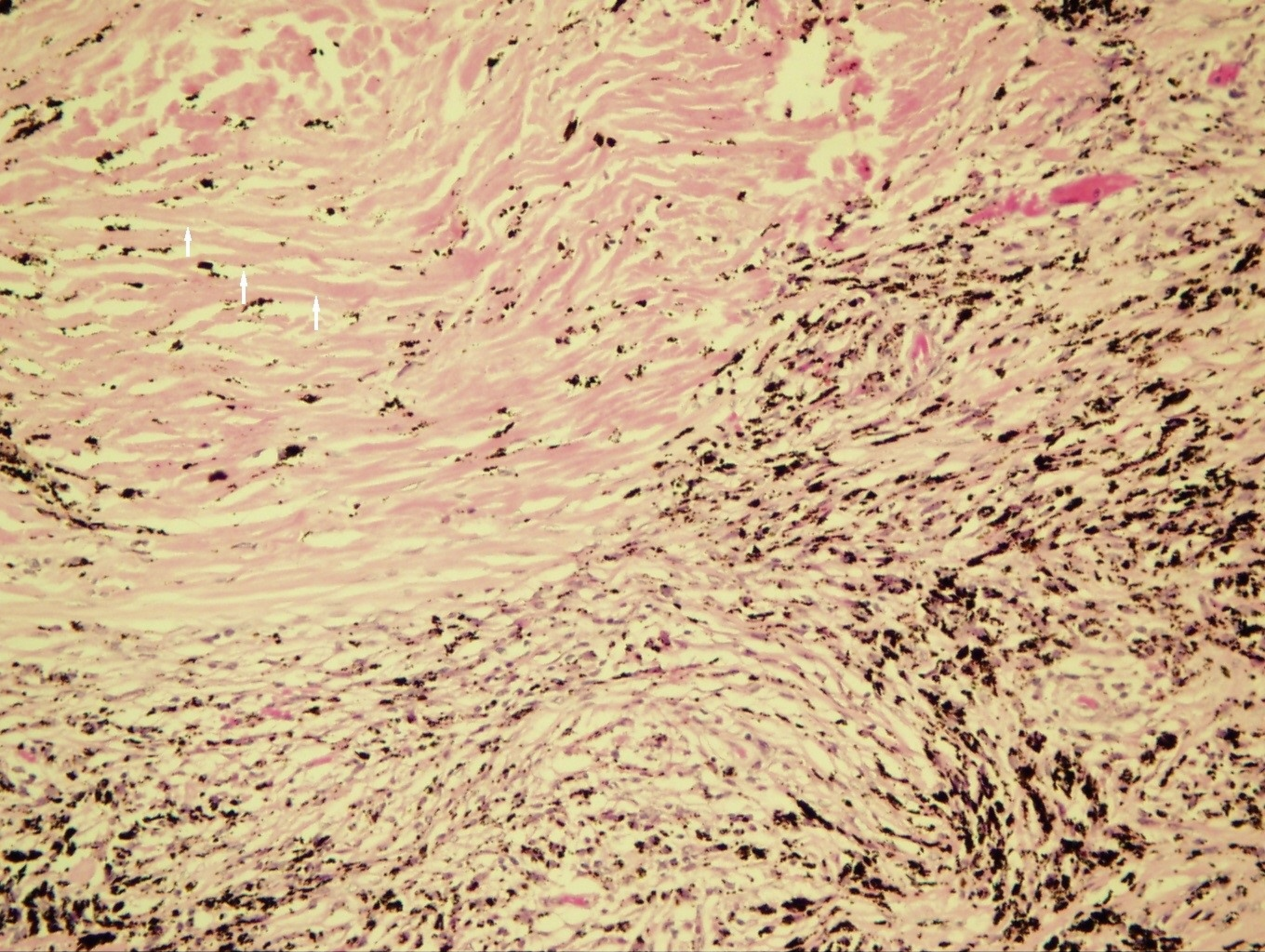


Figure 28: Progressive massive fibrosis. Disorganized interwoven collagen bundles (arrows) are heavily impregnated by particles of black pigment.



Figure 29: Rheumatoid pneumoconiosis. Thin-walled cavities (arrows) are best seen in the lower lobe in a background of simple coal workers' pneumoconiosis with coal macules.

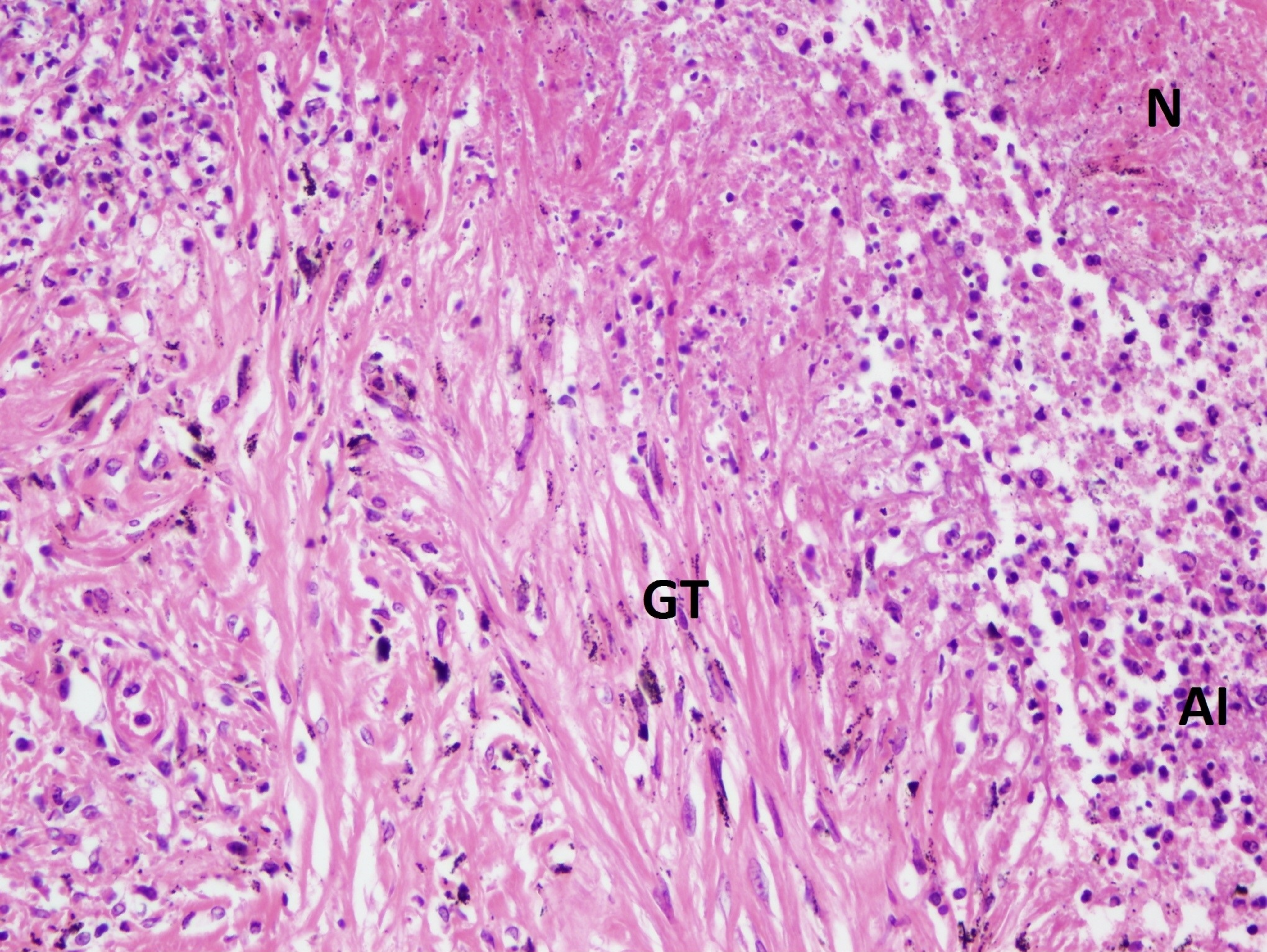


Figure 30: Rheumatoid pneumoconiosis. The lesion is composed of acute inflammation (AI), necrosis (N), and organizing granulation tissue (GT).

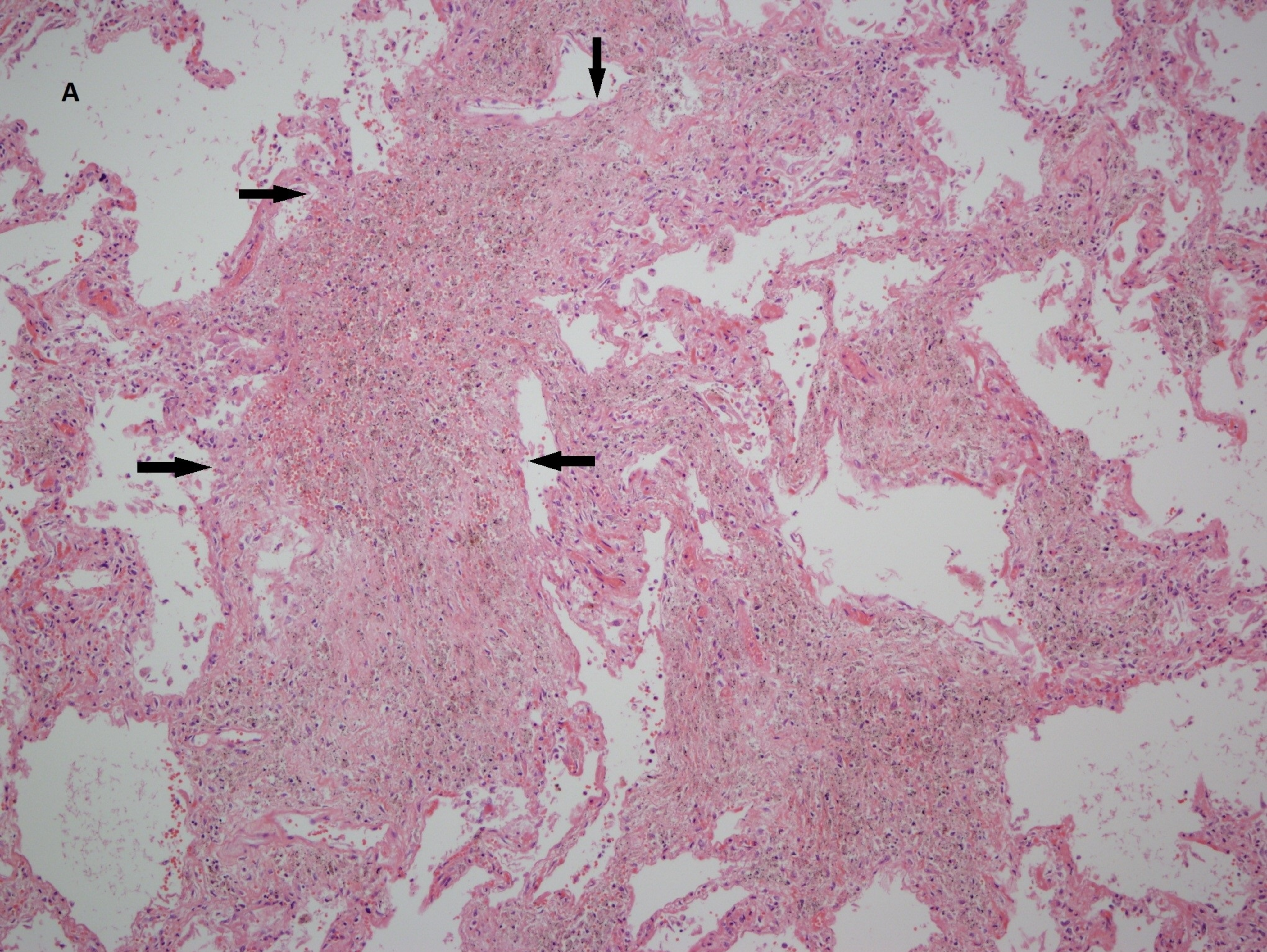


Figure 31: Diffuse interstitial fibrosis and alveolar remodeling with abundant mineral dust deposition in an underground coal miner. Normal alveolar architecture (A) is replaced by connecting bands of fibrous tissue (delineated by arrows).

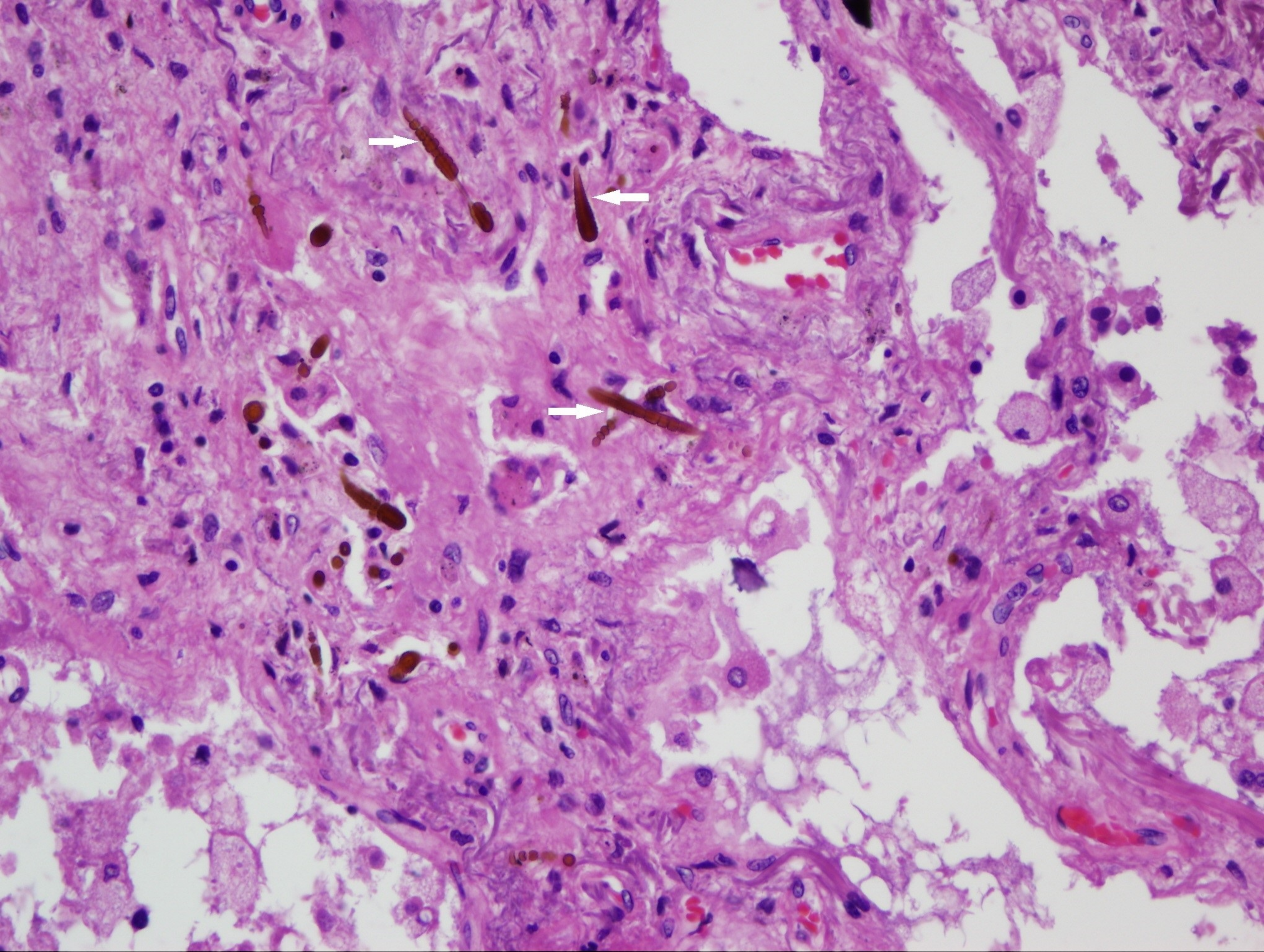


Figure 32: Asbestosis. Ferruginous (asbestos) bodies (arrows) and interstitial fibrosis.

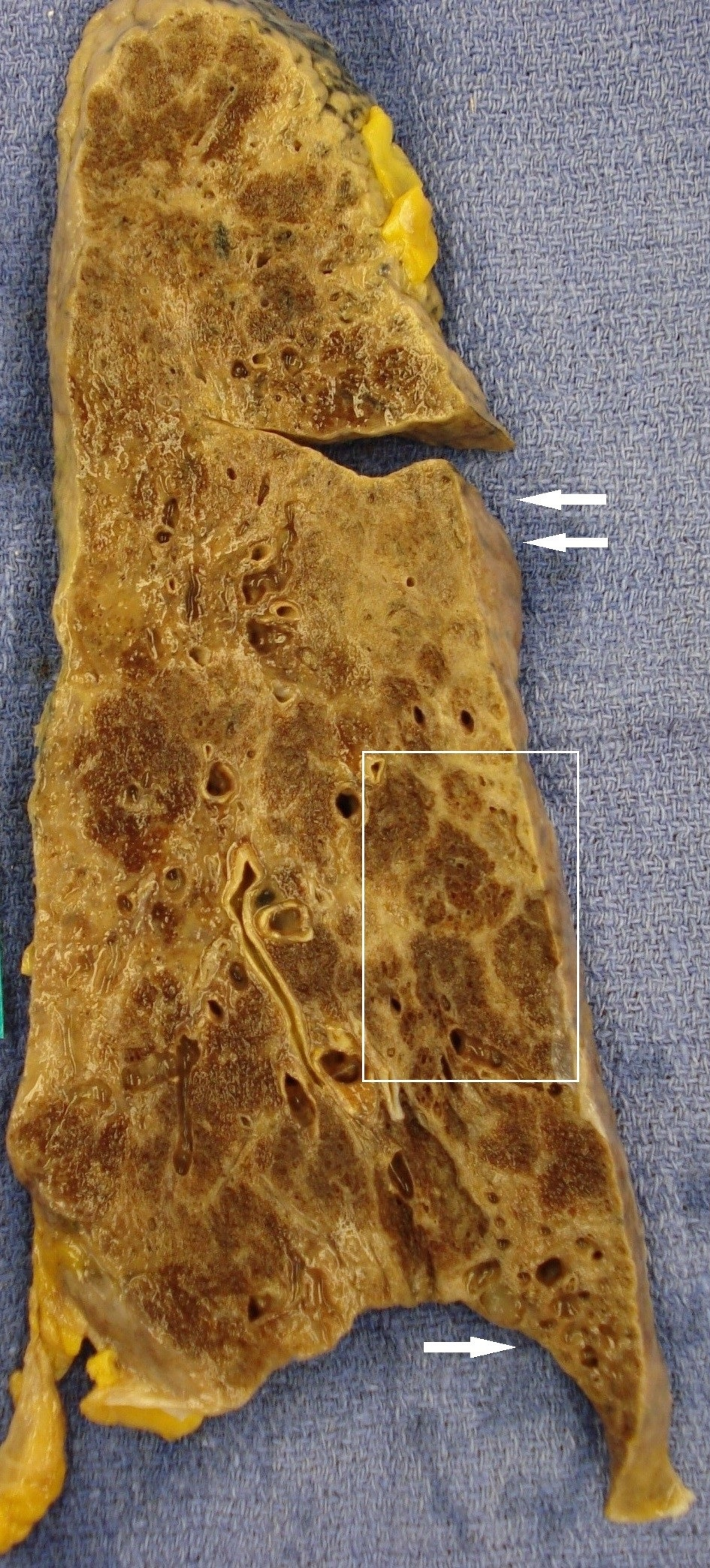


Figure 33: Asbestosis. Macroscopic features include interconnected fibrous trabeculae (represented within rectangle), diffuse fibrosis (double arrows), and honeycombing (single arrow, present in costophrenic angle).

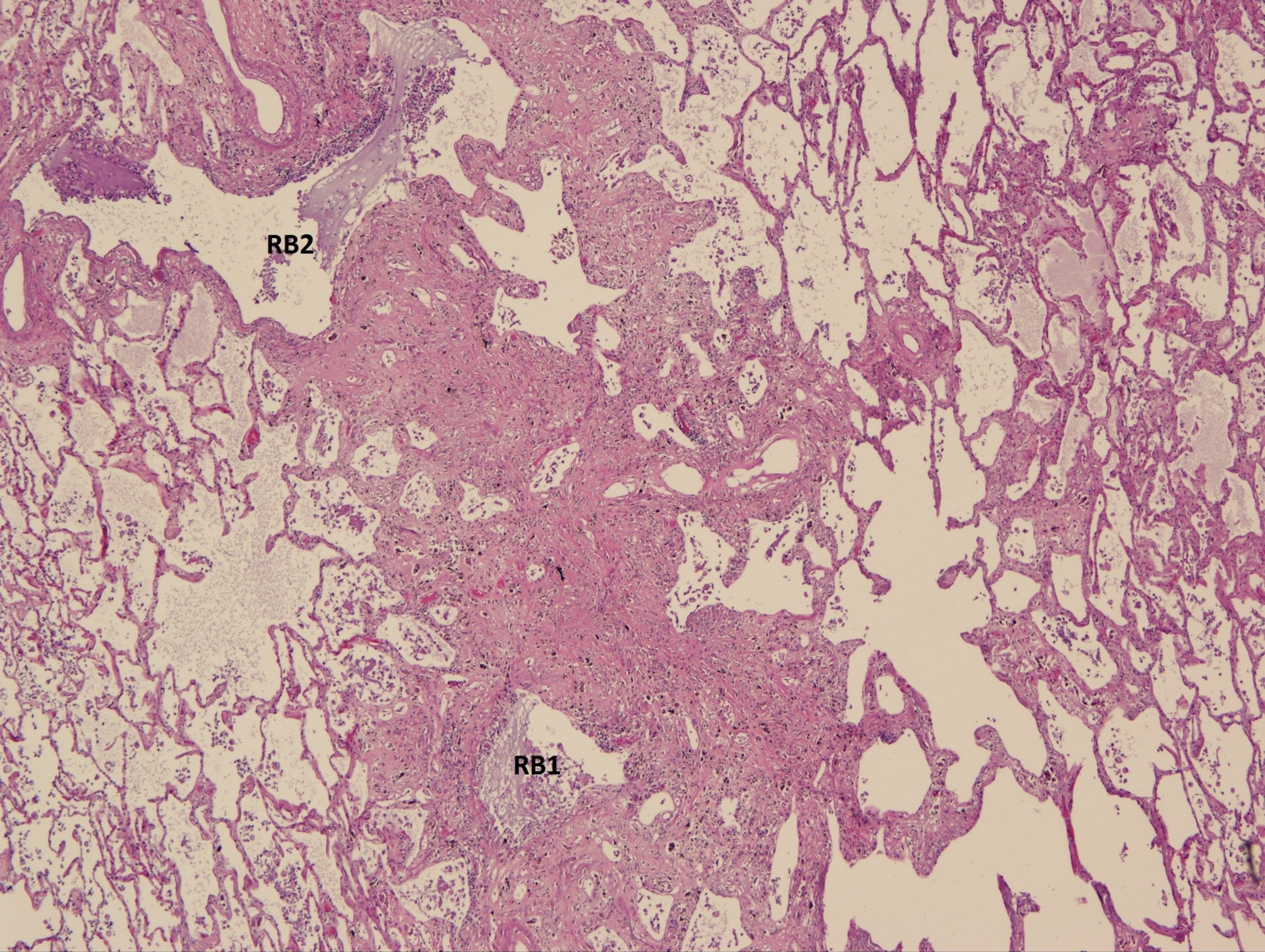


Figure 34: Asbestosis. Interstitial fibrosis surrounds a respiratory bronchiole (RB1) and extends into the lobule toward the adjacent bronchiole (RB2) (grade 3 lesion).

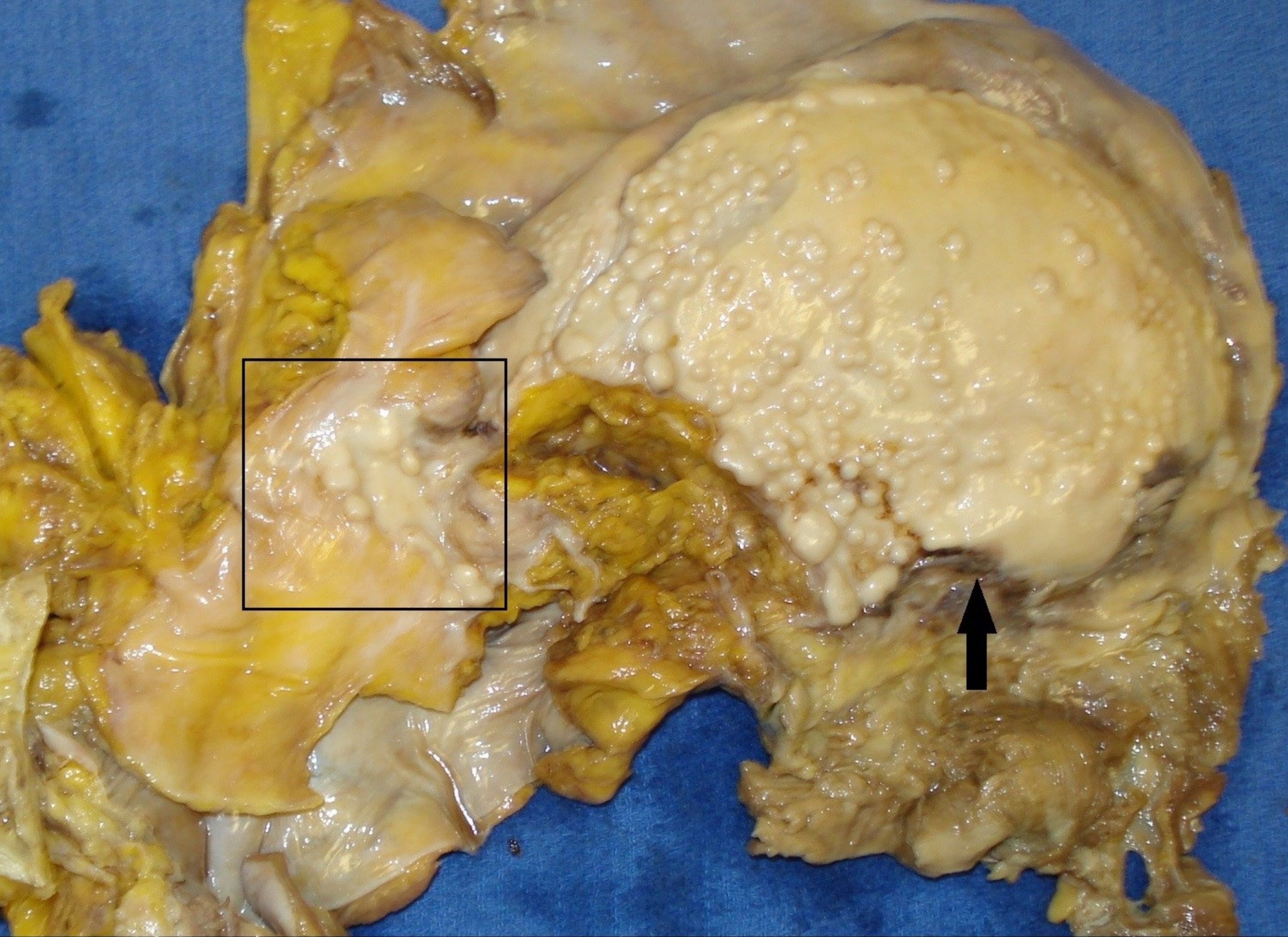


Figure 35: Pleural plaque. A large finely nodular plaque (arrow) covers the dome of the hemidiaphragm. A smaller plaque is present on the adjacent pericardium to the left (highlighted in square).



Figure 36: Pleural plaque. Acellular hyalinized collagenous tissue with a basket-weave pattern (best seen in rectangle). Note focal basophilic calcification (arrow) and sharp interface (arrowheads) with subpleural adipose tissue.

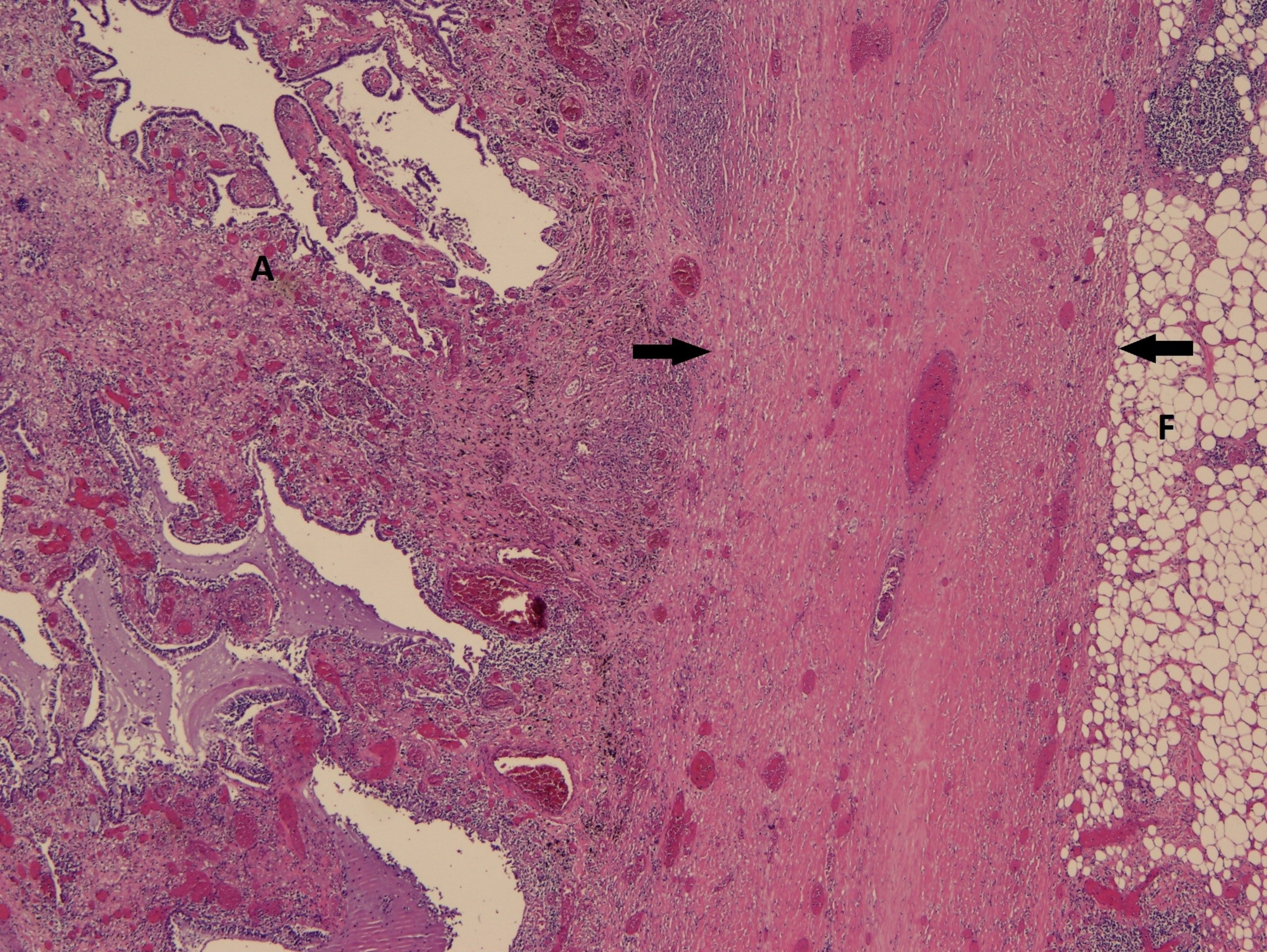


Figure 37: Diffuse pleural fibrosis. Thick band of collagen (between arrows) represents fusion of fibrotic parietal and visceral pleura. Asbestosis (A) with honeycombing is present to the left. Subpleural fat (F) is on the right.

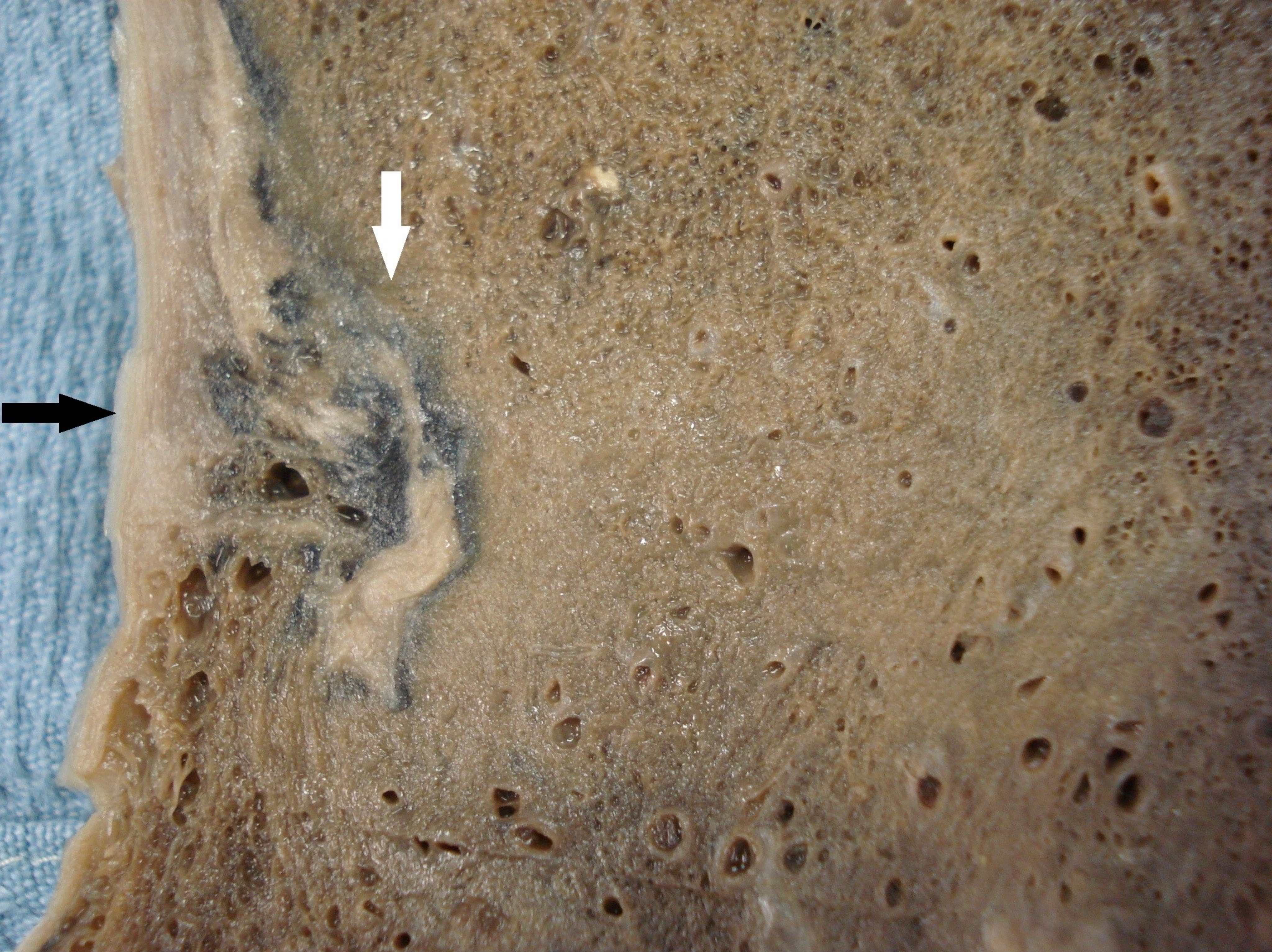


Figure 38: Rounded atelectasis. Thick fibrotic pleura (black arrow) overlies infolded lung with associated atelectasis (white arrow).

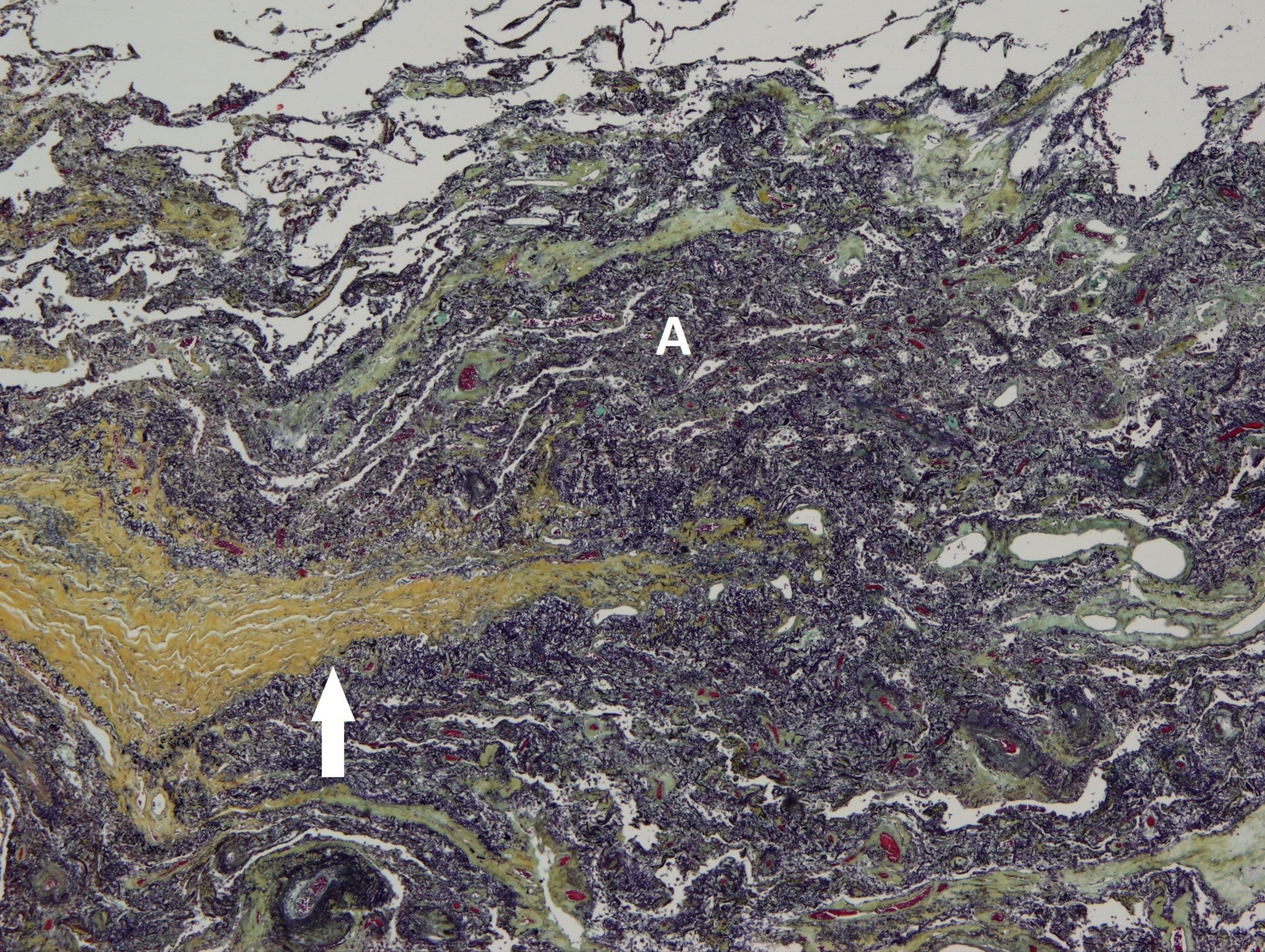


Figure 39: Rounded atelectasis. Pleural infold represented by the yellow wedge of collagen (arrow). Surrounding lung parenchyma is hyperelastotic and atelectatic (A). Alveolar elastic tissue stains black (Movat pentachrome stain).



Figure 40: Diffuse malignant pleural mesothelioma. Companion slices of lung show encasing rind of pleural-based tumor. Note increased thickness at lung base (black arrow) and tumor obliteration of costophrenic angle (white arrow).