Appendix E1

Of the 1496 patients, 335 were excluded because they had no noncontrast enhanced volumetric CT examination, no CT scans performed at our institution, or CT images of suboptimal quality. Patients with a diagnosis of sarcoidosis ($n = 163$), smoking-related interstitial lung disease ($n = 53$), drug-induced interstitial lung disease ($n = 37$), cryptogenic organizing pneumonia with fibrosis ($n = 28$), fibrosis and vasculitis overlap ($n = 13$), pleuroparenchymal fibroelastosis ($n = 6$), asbestosis ($n = 5$) and unclassifiable fibrosing lung disease (30) ($n = 111$).

The concept behind the study was to identify whether there were differences in the prevalence of ossification between clearly defined forms of fibrosing lung disease, most importantly for UIP (as in IPF) versus chronic HP or NSIP. Most NSIP occurs in patients with connective tissue disease, and patients with connective tissue disease who had a UIP pattern were excluded. Thus patients with a formally diagnosed classic connective tissue diseases or clinical findings suggestive of interstitial pneumonia with autoimmune features (24) were excluded if the predominant CT pattern was that of UIP or organizing pneumonia (characterized by honeycombing or consolidation, respectively) ($n = 188$). The exclusion of patients with connective tissue disease and UIP and those with connective tissue disease and OP was deemed necessary to create relatively pure and homogeneous cohorts of patients with UIP and IPF, chronic HP, and NSIP, respectively. Histopathologic diagnoses obtained within 2 years of the CT examination were available for 150 of 892 (16.8%) patients.

Appendix E2

All the CT images were obtained by using a routine clinical protocol with a 64-section multidetector CT scanner (Somatom Sensation 64; Siemens, Erlangen, Germany) or a four-section multidetector CT scanner (Volume Zoom; Siemens). Contiguous images were obtained with a section thickness of 1 mm, with the patient in a supine position, from the lung apices to the bases at full inspiration by using exposure parameters with automatically modulated amperage (range, 30–140 mA) and with 120 kVp. Images were reconstructed by using a high-spatial-resolution algorithm and were reviewed with Digital Imaging Communications in Medicine viewing software (DicomWorks, version 1.3; http://dicom.online.fr) and were viewed on high resolution monitors (screen size, 21.3 inches; 2048×1536 pixels; 0.22 mm pixel pitch) at appropriate window settings for viewing the lung parenchyma (width, 1500 HU; level, −500 HU) and, for calcific density lesions, bone windows (width, 2500 HU; level, 500 HU).

Appendix E3

Minor modifications were made to the Fleischner society glossary of terms for thoracic imaging (27) for visual scoring of individual parenchymal patterns. For reticulation, fine reticulation was defined as delicate criss-crossing linear opacities separated by less than 4 mm with or without related ground-glass opacity (28), and coarse reticulation was defined as criss-crossing linear opacities separated by more than 4 mm and thicker than fine reticulation (28).

Appendix E4

The positive predictive value for the presence of IPF of the threshold of men older than 65 years according to DPO definition 1 was calculated as 86 divided by 96 (IPF with DPO/total patients with DPO in men of over 65), or 90%. Positive predictive value for the presence of IPF of the threshold of men older than 65 years according to DPO definition 2 was calculated as 57 divided by 61, or 93%.