

# European Respiratory Society Annual Congress 2013

**Abstract Number:** 2755

**Publication Number:** P2275

**Abstract Group:** 1.3. Imaging

**Keyword 1:** Interstitial lung disease **Keyword 2:** Imaging **Keyword 3:** Idiopathic pulmonary fibrosis

**Title:** Multi-detector row computed tomography in imaging of interstitial lung diseases

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**Body:** Study objective: To test the role of multi-detector row computed tomography (MDCT) in the imaging of interstitial lung diseases (ILDs). Patients and Methods: The present study included 50 patients with ILDs. The diagnosis was based on clinical background, restrictive pulmonary defect and conclusive radiographic or histopathologic findings. All patients were studied using 16-slice MDCT with post-processing new modalities including maximum intensity projection (MIP), minimum intensity projection (MinIP), multiplanar reformatted (MPR) and three-dimensional volume rendering (VR). Results: Idiopathic interstitial pneumonias (IIPs) were in 46%, sarcoidosis in 26%, Langerhans' cell histiocytosis (LCH) in 8%, extrinsic allergic alveolitis (EAA) in 8%, scleroderma in 8%, lymphangioleiomyomatosis (LAM) in 2% and lymphangitis carcinomatosa in 2%. MDCT findings included the pattern of parenchymal abnormalities, anatomical distribution, and associated findings. Basal sub-pleural honey-combing was the predominant MDCT findings in usual interstitial pneumonia (UIP), patchy consolidation in cryptogenic organizing pneumonia (COP), ground-glass opacities in other IIPs types and EAA, upper lung zones cystic lesions with different sizes of peribronchial nodular opacities in LCH and uniformly distributed cystic lesions in LAM, perilymphatic small well defined nodules in sarcoidosis and peribronchovascular different sized nodular opacities in lymphangitis carcinomatosa. Conclusion: MDCT of the chest helps better detection, assessment of distribution, evaluation of extent, and characterization of different findings in ILDs, hence increasing the confidence in the diagnosis.