

# European Respiratory Society Annual Congress 2013

**Abstract Number:** 1168

**Publication Number:** 3026

**Abstract Group:** 1.3. Imaging

**Keyword 1:** ARDS (Acute Respiratory Distress Syndrome) **Keyword 2:** Anti-inflammatory **Keyword 3:** Imaging

**Title:** Interstitial lung disease induced by antibiotics. MDCT with perfusion, MRI with DWI and MDCT guided lung biopsy

Dr. Tamara 9671 Milosavljevic tamaradr2010@hotmail.com MD <sup>2</sup>, Dr. Aleksandar 9672 Ivkovic aleksandarvkvc@hotmail.com MD <sup>1</sup> and Prof. Dr Zoran 9673 Radovanovic sasadr2009@gmail.com MD <sup>1</sup>. <sup>1</sup> Center of Radiology, KC Nis, Nis, Serbia, 18106 and <sup>2</sup> Radiology, Special Hospital Niroshi, Nis, Serbia, 18106 .

**Body:** Purpose: main purpose is to show MDCT and MRI findings in interstitial lung disease caused by use of antibiotics and to determine role of radiology in diagnostic and proper medical care. Material: We examined 43 patients with acute interstitial lung disease induced by non-lung therapy of antibiotics, 27 patients with pyelonephritis, 12 with bone inflammation and 4 with pan sinusitis. There were 23 female and 20 male patients. They were from 15 to 46 years old. All patients were examined on MDCT and on 1.5T MRI using standard procedure with DWI. In 16 cases we performed fine needle biopsy guided with MDCT and in 2 cases fine needle biopsy guided with Ultra sound. Results: MDCT examination was performed in first 24 hour after arriving to hospital care. MRI was performed in first 7 days after arriving. We separate results in 3 different subgroups according to patient's conditions and MDCT findings. First subgroup was patients with bronchiolitis. Second subgroup was patients with bronchiectasis and pneumonitis. Third subgroup was patients with hard symptoms, like cystic fibrosis and alveolar necrosis. Standard MRI examination was followed with MRI DWI. Diffuse weighted images give us answer on condition of small vessels and mediastinal condition. Lung biopsy was performed in 18 cases. In 16 patients biopsy was guided with use of 16 or 64 MDCT. In 2 patients we performed fine needle biopsy controlled by using of Ultra Sound. Conclusion: Prolonged ILD may result in pulmonary hypertension, respiratory failure and heart failure. MDCT examinations have a great role in diagnostic and follow up of ILD. MRI with DWI is great tool for determining of small vessels and mediastinum.