

### **37. PULMONARY ALVEOLAR PROTEINOSIS: FROM HOUSE PAINTING TO DIFFUSE LUNG DISEASE**

Author: **George-Alexandru Chirita**

Scientific adviser: Toma Claudia, MD, PhD, Associate professor, *Grigore T. Popa* University of Medicine and Pharmacy, Iasi, Romania

**Background.** Pulmonary alveolar proteinosis (PAP) is a rare disease characterized by the accumulation of periodic acid-Schiff (PAS)-positive lipoproteinaceous material within the alveoli resulting in hypoxemic respiratory failure. Secondary PAP due to heavy inhalation exposure to inorganic dusts causes a reduction in the number and clearance capacity of alveolar macrophages.

**Case report.** We present you the case of a 42-year-old Sudanese patient with a 17-pack years smoking history who shows up at the hospital in December 2019 for dry cough, weight loss and exertional dyspnea. The onset of the symptoms started 2 months earlier, after using sandpaper on the walls while refurbishing his house. The initial diagnosis based on the clinical context and chest X-ray was pulmonary tuberculosis. However, the Acid-Fast Bacillus (AFB) smear was negative and the High-resolution CT showed a “crazy-paving” pattern. The blood count showed no evidence of hematologic malignancy or myelodysplastic syndrome. A flexible bronchoscopy to obtain bronchoalveolar lavage (BAL) fluid was performed. The examination of the BAL fluid showed the presence of PAS-positive material and the growth of E.coli colonies with no atypical cells found. Pulmonary function tests demonstrated a moderate reduction in the diffusing capacity for carbon monoxide (DLCO). : Using all of the findings, the diagnosis of secondary pulmonary alveolar proteinosis was established. The patient received antibiotic treatment with ceftriaxone and ciprofloxacin. Whole lung lavage under general anesthesia via a double-lumen endotracheal tube was performed, which proved to be effective. The patient was advised to stop smoking and a regular check twice a year was recommended.

**Conclusions.** Secondary PAP represents less than 10% of the total cases of pulmonary proteinosis. Further tests should be performed to identify the exact etiology in this situation The particularity of the case comes from the short exposure to the toxic, as well as its ethnic background.

**Key words:** pulmonary alveolar proteinosis, diffuse lung disease, PAS positive, toxic exposure

### **DEPARTMENT OF RHEUMATOLOGY AND NEPHROLOGY**

### **38. A MYCOBACTERIAL INFECTION AND THE RISK OF NEWLY DIAGNOSED SJÖGREN'S SYNDROME**

Author: **Dina Postovan**

Scientific adviser: Liliana Groppa, Md, PhD, University Professor, Department of Internal Medicine Rheumatology and Nephrology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova.