Abstract Group: 1.5. Diffuse Parenchymal Lung Disease
Keyword 1: Interstitial lung disease Keyword 2: Lung injury Keyword 3: Morphology

Title: From basic lesions to a pathological staging of pulmonary fibrosis

Dr. Irina 15352 Stoia i_stoia@yahoo.com 1, Prof. Dr Marius 15353 Raica raica@umft.ro MD 2, Prof. Dr Alexandru 15354 Nicodin acnicodin@gmail.com MD 3 and Prof. Dr Voicu 15355 Tudorache voicu.tudorache@yahoo.com MD 1. 1 Pneumology, University of Medicine and Pharmacy, Timisoara, Timis, Romania; 2 Histopathology, University of Medicine and Pharmacy, Timisoara, Timis, Romania and 3 Thoracic Surgery, University of Medicine and Pharmacy, Timisoara, Timis, Romania.

Body: Introduction: Pulmonary fibrosis is characterized by some morphological basic lesions which are associated to different degrees at the time of diagnosis. Based on this issue, a pathological staging of pulmonary fibrosis could be helpful to predict the evolution and the response to therapy. Material and methods: We have quantified the severity of lesions on 20 patients with lung fibrosis namely: the aspect of the pulmonary parenchyma, the presence and density of the inflammatory infiltration, the density and distribution of the macrophages and the extension of fibrosis. Specimens of lung parenchyma were obtained by video assisted thoracoscopy and slides were stained with routine haematoxylin-eosin, Masson's thricrome methods and Gordon Sweet silver stained. Each case was assigned a histological score on a scale of 0 – 12 and a degree of severity (I-IV). Results: four cases (20%) of degree IV (10-12) had a poor survival. There were found major changes of the parenchyma, extended nodular fibrosis and inflammatory infiltration as a marker for progressive evolution. Twelve cases (60%) of degree III (7-9) showed collagen fibres in homogenous fascicles and variable evolution and four cases (20%) of degree II (4-6) were more likely to remain stable. Collagen fibres were not organised in fascicles. Conclusion: Histological score could represent a useful tool in the evaluation of pulmonary fibrosis and reflects its heterogeneity. Our results suggest that the actual scoring system of pulmonary fibrosis can be improved, to give more precise information about clinical outcome.