Abstract Group: 1.5. Diffuse Parenchymal Lung Disease

Keyword 1: Idiopathic pulmonary fibrosis  Keyword 2: Epidemiology  Keyword 3: Infections

Title: Helicobacter pylori antibody positivity in idiopathic pulmonary fibrosis

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Body: Helicobacter pylori (HP) is a Gram-negative, spiral-shaped bacterium linked to gastrointestinal and extra-gastrointestinal disorders including respiratory diseases. Some recent reports proposed a protective role in bronchial asthma and rhinitis. Serological HP Antibody positivity was studied in 45 IPF (33 male, age 66.2 ±10.2 years) and 160 healthy controls (85 male, age 64.5 ±12 years). All patients were routinely followed at the Regional Center for Sarcoidosis and other Interstitial Lung Diseases of the University of Siena. Diagnosis of IPF was made according to the last ATS/ERS/JRS/ALAT guidelines. Statistically lower prevalence of HP Ab positivity was found in patients than controls (40.0% vs. 66.8%, p<0.05). IPF patients positive to HP had significant different percentages of FVC (p=0.016, 53.6 ±20.3 vs. 70.1 ±23.1), FEV1 (p=0.026, 57.4 ± 18.7 vs. 72.1 ± 21.9), TLC (p=0.037, 61.7 ± 16.0 vs. 74.5 ± 19.2) than IPF patients negative to HP. DLCO% differences could not be evaluated as a consistent number of patients with HP positivity did not perform DLCO measurement because on oxygen-therapy. There was no difference in prevalence of Hp+CagA+ between IPF patients and controls (p>0.05). The present study revealed that the positivity to HP Ab in serum of patients with IPF is lower than general population but it was associated with a more severe disease. Further investigations in a larger population are needed to confirm our results on Helicobacter pylori influence on IPF.