Title: Silent microaspiration in idiopathic pulmonary fibrosis: The role of videolaryngoscopy

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Body: A strong association between gastroesophageal reflux (GER) and idiopathic pulmonary fibrosis (IPF) has been reported. A significant proportion of patients may have signs of microaspiration and still remain asymptomatic. Videolaryngoscopy can be a useful tool to detect silent microaspiration, which to date has never been investigated in IPF. The aim of the study was to assess signs of micro-aspiration by videolaryngoscopy in patients with IPF and to relate them with clinical findings. We recruited 20 IPF patients (mean age 52 ± 7 yrs). We investigated the presence/absence of GER symptoms and performed videolaryngoscopy to evaluate abnormal laryngeal findings considered indirect signs of micro-aspiration. Three out of twenty patients (15%) had classic GER symptoms, while 17 (85%) did not report any kind of GER symptoms. Among asymptomatic patients, 5 (29%) had indirect signs of microaspiration at videolaryngoscopy while the remaining twelve had no such signs. Of interest, IPF patients with laryngeal abnormalities at videolaryngoscopy showed a lower FVC% at the diagnosis compared to patients without such abnormalities [46%(45-82) vs 75%(72-87) p=0,03]. Conversely, no differences in age, smoking history and BMI were found between the two groups of patients. In conclusion our study suggests that videolaryngoscopy may be a useful diagnostic tool to detect silent microaspiration in patients with IPF even in the absence of GER symptoms. These findings may have important therapeutic implications.