Reviewer's report

Title: The Prevalence of Gastro-Esophageal Reflux Disease and Esophageal Dysmotility in Chinese Patients with Idiopathic Pulmonary Fibrosis

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Reviewer: Edoardo Savarino

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Summary and Comments

The article entitled "The Prevalence of Gastro-Esophageal Reflux Disease and Esophageal Dysmotility in Chinese Patients with Idiopathic Pulmonary Fibrosis" by Gao et al. is a prospective study designed to evaluate the prevalence of GERD and esophageal motility disorders in 69 Chinese IPF patients by using HiRM and impedance-pH monitoring. The main results of the investigation were: 1) GERD prevalence was higher among IPF patients; 2) IPF patients with GERD had an increased prevalence of weak peristalsis, greater acid exposure percentage, higher bolus exposure time and more episodes of distal and proximal reflux than those without reflux; 3) symptoms presence alone were not good predictor of the 37 presence of reflux due to poor sensitivity and specificity.

The main idea of the study is not original since previous studies have already assessed this issue (Am J Respir Crit Care Med Vol 179. pp 408–413, 2009; Eur Respir J 2013; 42: 1322–1331). In the latter investigations it has been shown as patients with IPF or scleroderma with lung involvement presented less commonly with typical reflux symptoms (heartburn and regurgitation) than patients without IPF, higher esophageal acid exposure time, greater number of reflux episodes (impedance-pH testing was used!) and a positive correlation between severity of reflux with pulmonary fibrosis. Thus, it appears almost incredible that the authors did not analysed them in order to compare their results with those observed previously in Western population by using the same technique. This is a pity because this study has also few points of strength (use of the state-of-the-art techniques to assess both reflux disease and esophageal motility, the prospective design and the number of patients enrolled with IPF) that make this investigation, although only confirmatory of previous findings, relevant for the topic (reflux in IPF).

Major Compulsory Revisions:

1. Methods. The period of wash-out PPI therapy before impedance-pH testing is too short (at least 7 days are necessary for the stomach to restore is capability to produce acid at pre-therapy level). Please, justify this decision and include them among the limitations of the study.

2. Methods. There was no control group in this study. Please, comment on that among the limitations of the study

3. Methods. Reference 11 is inappropriate since no normal values are provided
in that paper.
4. Methods. It is not clear which parameters have been considered for GERD + and GERD -. Please, clarify on the methods when an IPF was positive for GERD (i.e. abnormal acid exposure and/or abnormally number of reflux episodes and/or……?)
5. Results. Data on PPI use among subjects have not been provided and discussed. Please, add this crucial information
6. Discussion. Data on Sens, Spec, PPV and PNV of GERD symptoms should be provided in the results and then explained and discussed in the Discussion section
7. Data on bolus transit should be highlighted as they are unique of this study

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests