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Statement of Interest: Statements of interest for all authors can be found at www.erj.ersjournals.com/site/misc/statements. xhtml

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DOI: 10.1183/09031936.00194810

Dyspnoea: a prognostic marker for idiopathic pulmonary fibrosis

To the Editors:

NISHIYAMA *et al.* [1] have nicely evaluated the role of dyspnoea in daily life as an independent prognostic marker in idiopathic pulmonary fibrosis (IPF). However, a few patient- and diseaserelated confounding factors should be kept in mind while evaluating this distressing symptom.

IPF is characterised by episodes of rapid deterioration secondary to acute exacerbations or infections [2], which may profoundly increase the severity of breathlessness. This feature has inadvertently not been considered by NISHIYAMA et al. [1] while prognosticating regarding patients with IPF, and has possibly led to inaccurate disease assessment. Serial evaluation of dyspnoea could have solved this issue and strengthened its prognostic role, but was not carried out during the study. In addition, factors such as age, sex and cultural background, disease complications such as pulmonary hypertension, and comorbid conditions such as asthma, anaemia, heart failure and renal failure may significantly alter dyspnoea level and lead to misinterpretation of disease survival. Severity of breathlessness in IPF may also be affected by the nutritional status (muscle mass) and level of daily activity (exercise tolerance) of the subjects, which were not discussed in this study.

Dyspnoea is a purely subjective parameter and can even be altered by a patient's state of mind. More importantly, the patient's perception of dyspnoea (and its grading) may change with involvement of other organ system or the presence of other symptoms about which the patient is more concerned.

Dyspnoea, although the most common symptom of IPF, is at times difficult to interpret. Grading of dyspnoea may provide an important clue regarding disease severity, but should never hinder a clinician from predicting disease outcome using proven objective parameters. Serial evaluation of dyspnoea may be more appropriate than a single assessment in prognosticating IPF.

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Statement of Interest: None declared.

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DOI: 10.1183/09031936.00141610

From the authors:

We read with genuine interest the correspondence of D. Aggarwal and P.R. Mohapatra, in which they commented on our article demonstrating the relationship between daily dyspnoea and survival in idiopathic pulmonary fibrosis (IPF) [1].

Acute exacerbation of IPF is characterised by acute deterioration of dyspnoea within a few weeks, newly bilateral lung infiltrates, worsening of oxygenation and absence of an apparent cause, such as infection and pulmonary embolism [2, 3]. As D. Aggarwal and P.R. Mohapatra commented, dyspnoea deteriorates when acute exacerbation of IPF occurs. It is already known that acute exacerbation of IPF has a great impact on survival [4]. However, deterioration of dyspnoea in acute exacerbation of IPF is apparently another aspect of IPF and should be distinguished from baseline daily dyspnoea. The aim of our study was to evaluate the significance of daily dyspnoea assessed using a simple assessment method at diagnosis as a prognostic indicator in IPF [1]. Although evaluation of the relationship between the serial change in daily dyspnoea and survival is of interest, it should be left to future research.

It is true that dyspnoea is a subjective parameter that can be influenced by several factors, as D. Aggarwal and P.R. Mohapatra noted. However, daily dyspnoea assessed using the same method (the modified Medical Research Council scale) as used in our study has already been recognised as an important prognostic marker in chronic obstructive pulmonary disease [5]. We think that it is important to interpret daily dyspnoea as a definite parameter not a vague one. Its impact on not only survival but also health-related quality of life is quite relevant.

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Statement of Interest: None declared.

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