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An algorithm for referral of patients with IPF for lung transplantation

We read with interest the paper by Mackay *et al* on the use of disease progression in patients with pulmonary fibrosis as a trigger for referral for lung transplantation.¹ The authors attempt to identify the reasons why patients with idiopathic pulmonary fibrosis (IPF) have a higher mortality on the waiting list for lung transplantation than non-IPF patients. Although mortality on the waiting list is a major concern, physicians dealing with these patients face even more difficulties such as deciding which treatment to administer to a given patient: transplantation, inclusion in a clinical trial or classical treatment (corticosteroids, immunosuppressives and N-acetylcysteine). In order to tackle these questions we have developed an algorithm that deals with these key issues (fig 1).

Confronted with a patient with IPF, every physician needs to consider whether the patient would be suitable for transplantation as this is the only treatment that has been shown to have survival benefit.² Early referral is important to decrease mortality on the waiting list. If there are no overt contraindications such as age >65–70 years, recent untreatable malignancy or major vascular disease, the patient needs to be referred to a transplant centre.³ If there the patient is found to be an appropriate candidate, the next question is whether the patient needs to be listed immediately. Key issues are blood group (as blood group O increases the waiting time significantly) and height and sex of the patient (as smaller female patients tend to have a longer waiting time on the list). Progression of disease is a chief determinant in this decision, as highlighted by the studies by Mackay *et al*¹ and Collard *et al*.⁴ Another study⁵ found that the clinical course of patients with IPF was characterised by clinical parameters such as deterioration in forced vital capacity, carbon monoxide transfer factor and alveolar–arterial oxygen gradient, worsening dyspnoea over 72 weeks, the number of hospital admissions and acute exacerbations of IPF. If the patient has rapidly progressing disease, he/she will be listed without delay or

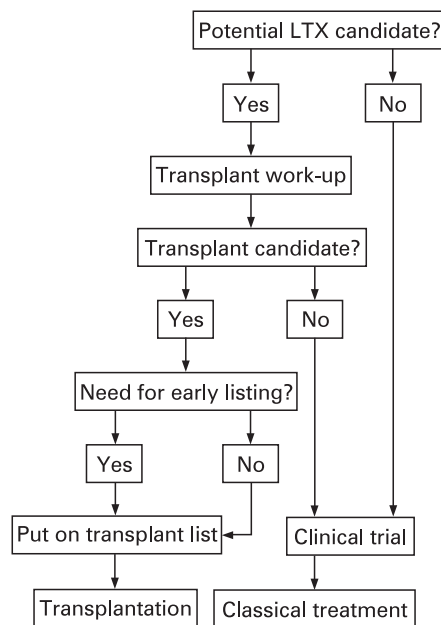


Figure 1 Algorithm for treatment of patients with idiopathic pulmonary fibrosis. LTX, lung transplantation.

otherwise we perform a follow-up from close by. In this case it might be useful to include the patient in a clinical trial with a promising antifibrotic drug. As there is insufficient evidence for a significant effect of classical treatment in IPF, it is our opinion that, for proven IPF, the classical anti-inflammatory treatment needs to be reserved for patients not suitable for transplantation and those for whom inclusion in a clinical trial is not possible owing to non-compatibility with the inclusion and exclusion criteria of the protocols.

In conclusion, the article by Mackay *et al* once more points to the fact that we need to choose protocols carefully to determine what to do with patients with IPF in order to provide every patient with the most effective treatment at the best possible time. We consider that this algorithm is easy but effective in dealing with these problems.

W A Wuyts, M Thomeer, L J Dupont, G M Verleden

University Hospital Gasthuisberg, Department of Respiratory Medicine, Leuven, Belgium

Correspondence to: Dr W A Wuyts, University Hospital Gasthuisberg, Department of Respiratory Medicine, Herestraat 49, B-3000 Leuven, Belgium; wim.wuyts@uzleuven.be

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Authors' reply

We thank Dr Wuyts *et al* for their letter and appreciate their comments on the importance of our observations. Clinicians have to make a number of difficult decisions when deciding on treatment options in patients with pulmonary fibrosis. These include whether to commence classical treatment which offers little therapeutic advantage, or whether to enter patients into a clinical trial. Importantly, in those eligible, identification of the optimal timing for referral for lung transplantation assessment is critical as this is the only treatment to be of proven benefit.

We welcome the algorithm presented by Wuyts *et al* as a simple guide for all clinicians involved in the management of patients with pulmonary fibrosis. It emphasises the pivotal role that the early identification of potential lung transplantation candidates plays, as well as considering eligibility for entry into a clinical trial. We would, however, suggest that this algorithm could be modified to allow those assessed and listed for transplantation to be considered for inclusion in such trials as a possible “bridge to transplant”.

While this algorithm seems to relate to only those with idiopathic pulmonary fibrosis, we would like to suggest that it might be applied to all patients with pulmonary fibrosis. Our study highlighted that patients with pulmonary fibrosis may be misclassified on pretransplant histology and radiology or on clinical grounds, and that other forms may present with a phenotype that mimics usual interstitial pneumonia. We therefore believe that phenotype based on rate of disease progression seems to be more predictive of poor survival than histological classification or any one physiological measure.

In summary, we welcome this algorithm which challenges the conventional approach to treatment options in pulmonary fibrosis by considering first the need and suitability for transplantation and thereafter considering classical treatment or entry into a clinical trial. Such a radical change in the approach to the management may bring about considerable advances without the need for an exhaustive search for the precise histological classification.

L S Mackay, A J Fisher

Applied Immunobiology and Transplantation Group, Institute of Cellular Medicine, University of Newcastle, Newcastle upon Tyne, UK

Correspondence to: Dr A J Fisher, Freeman Hospital, Newcastle upon Tyne NE7 7DN, UK; a.j.fisher@ncl.ac.uk