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IPF, comorbidities and management implications: Patient case 1

Michael Kreuter

Centre for Rare and Interstitial Lung Diseases, Pneumology and Respiratory Critical Care Medicine, Thoraxklinik, University of Heidelberg, and Translational Lung Research Center Heidelberg (TLRC), Member of the German Center for Lung Research (DZL), Germany

Patient presentation and follow-up

The patient was a 54-year-old man who presented with mild dyspnoea, a persistent cough and "velcro" crackles. He worked as a carpenter and smoked (10 pack–years) until 14 years ago. He had arterial hypertension and suffered a deep vein thrombosis 2 years ago. His lung function was impaired with an FVC of 70% and DL_{CO} of 43%.

Diagnostic work-up

Initial HRCT showed an unclear consolidation in the left upper lobe and a UIP pattern (Figure 1). After discussion with the multidisciplinary team, the patient was diagnosed with IPF as well as suspected lung cancer in the left upper lobe. The patient underwent CT-guided biopsy which revealed squamous cell carcinoma. Further work up classified it as cT3 cN1 cMo (Figure 2).

Management and follow-up

Following extensive discussion in the multidisciplinary tumour board, the patient underwent thoracic surgery and atypical tumour resection. Two days later he experienced a rapid deterioration with

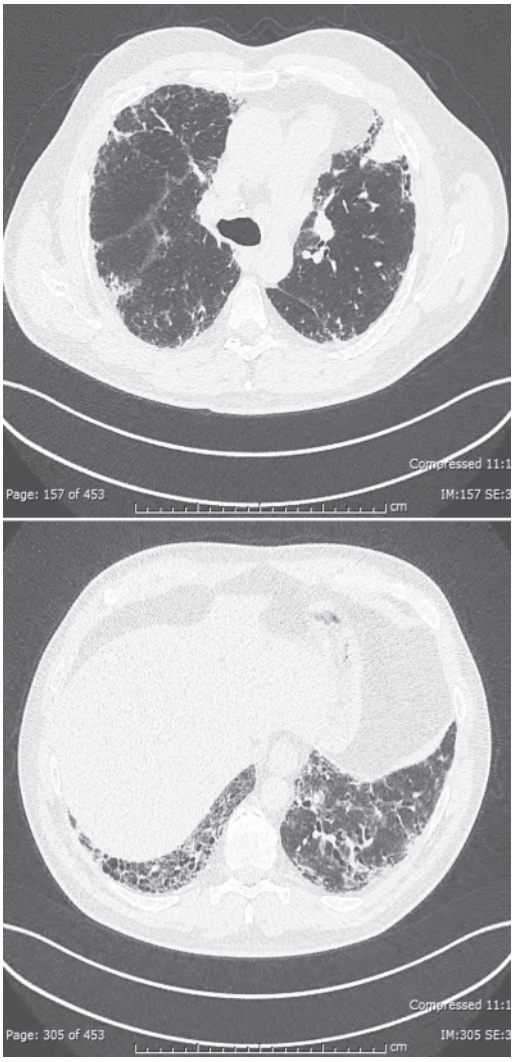

Fig. 1. Initial HRCT

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Correspondence: Michael Kreuter
Centre for Rare and Interstitial Lung Diseases,
Pneumology and Respiratory Critical Care Medicine,
Thoraxklinik, University of Heidelberg, and
Translational Lung Research Center Heidelberg (TLRC),
Member of the German Center for Lung Research (DZL),
Germany

Fig. 2. CT-guided biopsy

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severe dyspnoea and desaturation. HRCT revealed contralateral ground glass opacification concordant with the diagnosis of an acute exacerbation of IPF after surgery (Figure 3). After improvement following high dose steroid therapy, the patient had another episode of severe dyspnoea caused by a pulmonary embolism two weeks later.

According to the literature, all treatment options in patients with IPF and resectable lung cancer are associated with a high rate of adverse events. In a recent series of such patients, significant treatment-related toxicities occurred in 55% overall, with the figure rising to 67% in those undergoing surgery and 63% with chemotherapy (1). Post-operative mortality at 30 days was 25%, highlighting the very poor prognosis for IPF patients who develop lung cancer (2).

Conclusion

This case is illustrative of the fact that comorbidities significantly influence the course of IPF and that lung cancer is the most severe of these. As there are limited data on treatment selection and initiation, multidisciplinary evaluation of therapeutic options in patients with this challenging comorbidity is of critical importance. The patients' rapid decline following tumour resection reflects the literature which states that all treatment options for patients with IPF and resectable lung cancer are associated with a high rate of adverse events.

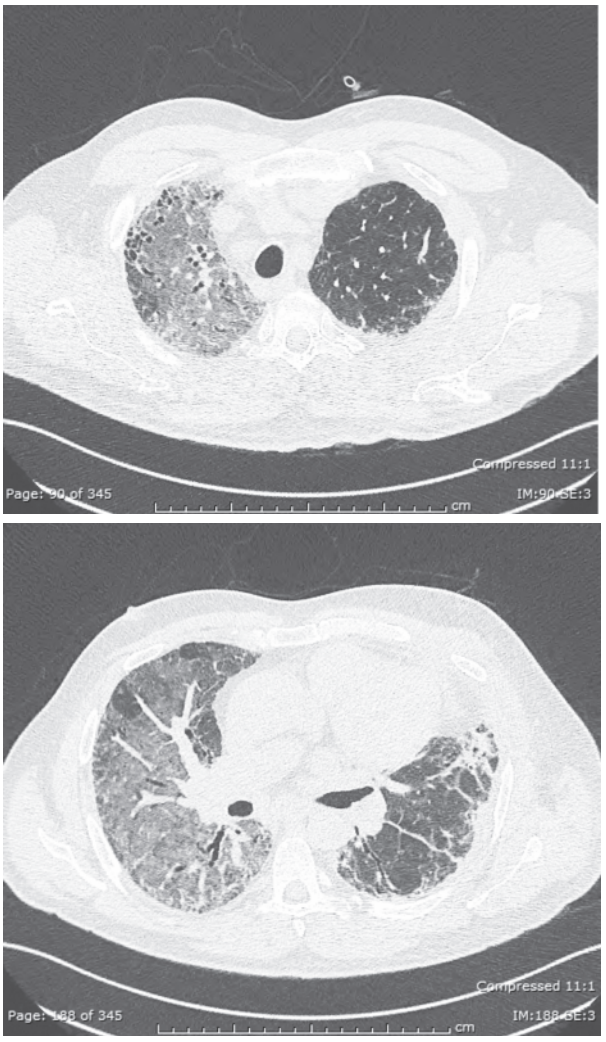

Fig. 3. Acute exacerbation

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