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Incidence and etiology of chronic pulmonary infections in patients with idiopathic pulmonary fibrosis

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ABSTRACT

Background

The incidence and etiologies of chronic pulmonary infection (CPI) in patients with idiopathic pulmonary fibrosis (IPF) have been poorly investigated.

Methods

We conducted a retrospective study of 659 patients with IPF to assess the incidence, etiologies, and risk factors of CPI development. CPI was defined if the etiology of infection was diagnosed one or more months after the onset of symptoms or upon the appearance of new shadows on pulmonary radiological images.

Results

At IPF diagnosis, 36 (5.5%) patients had CPI, and 46 (7.0%) patients without CPI at IPF diagnosis developed CPI over a median follow-up period of 6.1 years. The incidence density of CPI development was 18.90 cases per 1000 person-years. Detected organisms from these 46 patients were *Mycobacterium avium* complex in 20 patients, othernontuberculous mycobacteria in 4, *M. tuberculosis* in 7, *Aspergillus* spp. in 22, and *Nocardia* sp. in one. In a multivariate Cox regression hazard model, PaO_2 <70 Torr and KL-6 ≥2000 U/mL were associated with CPI development.

Conclusions

Nontuberculous mycobacteria, *M. tuberculosis*, and *Aspergillus*and *Nocardia* spp. were the four most frequent etiologies of CPI in patients with IPF. During follow-up of IPF, clinicians should pay attention to the development of CPI, especially in patients with PaO_2 <70 Torr or KL-6 ≥2000 U/mL.

EXTERNAL LINK

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ATTACHMENTS

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