The introduction of inhaled corticosteroids (ICs) to COPD therapy has been widely debated in medical and scientific communities. Weaning from ICs in COPD, and 4 other important randomized trials that evaluated the effect of IC discontinuity (COPE, COSMIC, INSTEAD, and WISDOM), have also created considerable controversy.[5] However, ICs in association bronchodilators have long been a mainstay of treatment for COPD. It was only the recent introduction of new long-acting bronchodilators, specifically developed for the treatment of COPD, and new fixed combinations of LABA-LAMA that led to the current debate in the medical community.[6] There is now enough clinical evidence to challenge the widespread use of IC in COPD in patients who do not suffer from exacerbations and who have not shown any benefit with ICs.[7]

The science of medicine is characterized by its evidence-based approach and its revisibility. As a human activity, it is necessarily subject to dogmas and beliefs. Whether it was the medical representation of COPD as an inflammatory disease or the medical belief of a real benefit to the patient that led to the widespread use of ICs in COPD is still unclear. However, the medical community must wonder how real-life patients in real-life situations are represented in large randomized studies (often double-blind, placebo-controlled trials) supporting evidence-based medicine.

Conflicts of Interest

The author has no conflicts of interest to declare.

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The Co-occurrence of Bronchial Anthracofibrosis and Interstitial Lung Disease☆

Antracofibrosis bronquial y enfermedad pulmonar intersticial simultáneas

To the Editor:

The term 'bronchial anthracofibrosis' (BAF) was enunciated by Chung et al.[1] from Korea, when they described bronchoscopically visible anthracotic pigmentation and narrowing/obliteration of bronchi in 28 elderly patients with significant exposure to wood smoke. The mucosal pigmentation is characteristically seen around the branching point.

Increasing awareness of this disease has led to the clinical, radiological and bronchoscopic characterisation of BAF, and its strong association with tuberculosis, pneumonia, chronic obstructive pulmonary disease and lung cancer have been highlighted.[2] However, the association of BAF with interstitial lung disease (ILD) has rarely been documented. Only two reports in four patients have been published,[3,4] with only one report detailing the co-occurrence of usual interstitial pneumonia (UIP) pattern with BAF.[5] The rarity of such a description in the literature prompted us to report 2 female patients who underwent diagnostic fiberbronchoscopy (FOB) for

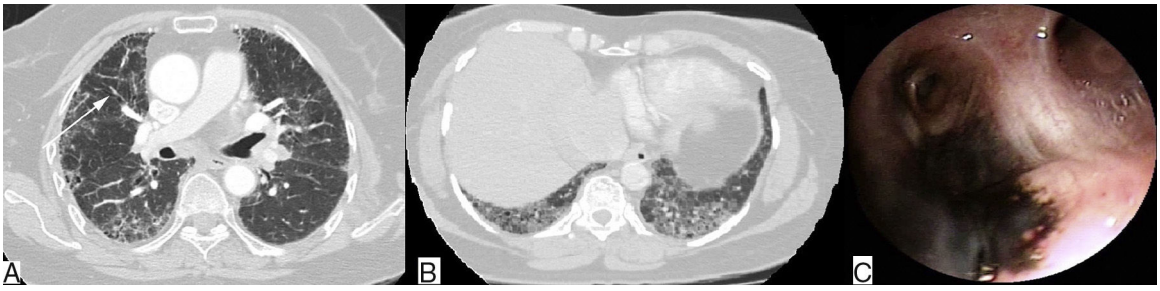

Fig. 1. (A) High resolution computed tomography (HRCT) of the thorax [lung window] showing interlobular septal thickening along with ground glass opacities and traction bronchiectasis in a sub-pleural distribution with multifocal narrowing of the right upper lobe bronchus (white arrow). (B) Chest high resolution computed tomography (HRCT) (lung window) showing interlobular septal thickening along with honeycombing in a basilar and sub-pleural distribution suggestive of UIP pattern. (C) Fiberbronchoscopic image showing anthracotic pigmentation of bronchial mucosa with narrowing and distortion of the apical segment of right upper lobe bronchus.

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evaluation of BAF. A diagnosis of associated ILD was also established in these patients, 1 with non-specific interstitial pneumonia (NSIP) pattern and the other with UIP pattern.

Of the 29 patients diagnosed with BAF in 1 unit, 3 females had an associated diagnosis of ILD. Two patients had a UIP pattern,[5] while the third had an NSIP pattern. Both patients were elderly females, never smokers, with a significant history of biomass fuel smoke exposure. Chest high resolution computed tomography (HRCT) in the first patient revealed interlobular septal thickening with ground glass opacities and traction bronchiectasis in a sub-pleural distribution suggestive of fibrotic NSIP pattern, along with multifocal narrowing of right upper lobe bronchus (Fig. 1A). Interlobular septal thickening along with honeycombing in a basilar and sub-pleural distribution suggestive of UIP pattern was seen in the second patient (Fig. 1B). Both patients desaturated on 6-minute-walk test, while pulmonary function testing revealed a restrictive defect. FOB showed anthracotic pigmentation and narrowing/distortion of the affected bronchi (Fig. 1C). Transbronchial biopsy in the first patient suggested NSIP, while it was inconclusive in the other. Stains and cultures of bronchial aspirate were negative.

The diagnosis of BAF was based on: (1) long standing history of biomass fuel smoke exposure, (2) multifocal narrowing on HRCT, and (3) confirmed bronchoscopically by visualisation of (a) bluish-black hyper pigmented areas, (b) narrowed/distorted bronchus.[2] ILD was diagnosed on the basis of: (1) restrictive pattern on PFT, (2) desaturation on six-minute walk test, (3) NSIP/UIP pattern on HRCT.

BAF, as a distinct clinical entity, was first recognised in India in a 65-year-old female with a significant history of wood smoke exposure.[2] A bronchoscopic diagnosis of BAF and tuberculosis presenting as a middle lobe syndrome was established.

A database search found only 5 patients with BAF associated with ILD.[3–5] Of 114 patients with BAF from Korea, mention was made of 1 patient with a UIP pattern on chest CT.[3] Three patients from Turkey had an "interstitial pattern" on HRCT with no further details.[4] We described a patient with BAF with associated ILD and a UIP pattern on HRCT.[5]

On HRCT, NSIP pattern has classically been described as areas of ground-glass opacities with reticulation, traction bronchiectasis with little or no honeycombing in a basal and sub-pleural distribution. Our patient also had similar findings on HRCT, and histopathology of the transbronchial biopsy was suggestive of NSIP along with dense anthracotic pigmentation.

On HRCT, UIP pattern is defined by the presence of areas of honeycombing, predominantly with a basal and subpleural distribution, and is recognised as a characteristic feature of idiopathic pulmonary fibrosis (IPF), as was the case in our patient. However, this pattern can also be seen in ILDs associated with rheumatoid arthritis, chronic hypersensitivity pneumonitis, collagen vascular disease.[5]

The presence of anthracotic pigmentation along with narrowing and distortion of the affected bronchus on FOB, as seen in our patients, is confirmatory of BAF. Due to the distinct paucity of reports documenting the concomitant occurrence of BAF and ILD, we are unable to ascertain whether this association is definitive or a chance occurrence. Once this co-occurrence receives the attention that it deserves, we may find answers to this perplexing question. There is an urgent need to develop non-invasive modalities to establish a diagnosis of BAF. The increasing recognition of BAF highlights the perilous consequences of biomass fuel exposure and the need to develop more sustainable forms of energy.

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