

Correspondence and Reply

Is treatment of serological ABPA similar to that of ABPA with bronchiectasis?



To the Editor:

We read with interest the case report by Reddy and Greenberger¹ wherein the authors describe the use of systemic glucocorticoids for the treatment of serological allergic bronchopulmonary aspergillosis (ABPA-S) complicating cystic fibrosis. Although ABPA-S is associated with poor control of symptoms, whether its treatment is similar to that of ABPA with bronchiectasis is currently not clear. The use of corticosteroids seems theoretically correct because ABPA is an allergic manifestation of exposure to fungal antigen. In a previous study in which patients with ABPA-S were treated with oral glucocorticoids, no patient developed central bronchiectasis at follow-up, suggesting that long-term outcome of ABPA-S is good and it behaves differently than ABPA.² Subsequently, we have followed patients with ABPA-S managed with inhaled corticosteroids alone, and again no patient has developed bronchiectasis at 5-year follow-up (R. Agarwal, I. S. Sehgal, S. Dhooira, A. N. Aggarwal, M. Garg, A. Chakrabarti, unpublished data, 2017).

In our opinion, the patient described in the report could have been treated with inhaled corticosteroids and long-acting beta-2 agonists using the single inhaler for maintenance and reliever therapy (SMART) approach.³ Subsequently, if the disease was uncontrolled, inhaled tiotropium and leukotriene modifiers should be added.⁴ We also would have preferred trying omalizumab before instituting glucocorticoids in a patient with ABPA-S.

Although the authors describe omalizumab as a novel treatment for ABPA,⁵ another novel approach in patients with ABPA and recurrent exacerbations is the use of inhaled amphotericin B. In a recently published randomized controlled trial, we have demonstrated that the use of inhaled amphotericin B was associated with significantly lower risk of exacerbations in patients with ABPA.⁶ Finally, the ABPA Working Group of the International

Society for Human and Animal Mycology has proposed an updated diagnostic criteria^{7,8} that is far more objective and should probably be used in preference to the older criteria (Table I).

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TABLE I. International Society for Human and Animal Mycology (ISHAM) ABPA Working Group criteria (2013) and the newly proposed criteria

ABPA Working Group criteria (2013) ⁷	Proposed modifications to the ISHAM Working Group criteria (2016) ⁸
A. Predisposing conditions Bronchial asthma, cystic fibrosis	A. Predisposing conditions Bronchial asthma, cystic fibrosis, chronic obstructive pulmonary disease, posttuberculous fibrocavitary disease
B. Essential criteria (both must be met)	B. Essential criteria (both must be met)
i. Serum <i>Aspergillus fumigatus</i> -specific IgE levels >0.35 kUA/L or positive type I <i>Aspergillus</i> skin test result	i. Serum <i>A fumigatus</i> -specific IgE levels >0.35 kUA/L ^{†‡}
ii. Elevated serum total IgE levels >1000 IU/mL*	ii. Elevated serum total IgE levels >1000 IU/mL*
C. Additional criteria (at least 2 of 3)	C. Additional criteria (at least 2 of 3)
i. Presence of precipitating (or IgG) antibodies against <i>A fumigatus</i> in serum	i. Serum <i>A fumigatus</i> -specific IgG levels >27 mgA/L [‡]
ii. Chest radiology findings consistent with ABPA	ii. Chest radiology findings consistent with ABPA
iii. Peripheral blood eosinophilia >500 cells/ μ L	iii. Peripheral blood eosinophilia >500 cells/ μ L

kUA, Kilounit of antibody; mgA, milligram of antibody.

*An IgE value of <1000 IU/mL may be acceptable if all other criteria are met or if there is intake of systemic glucocorticoids.

[†]Skin testing for *A fumigatus* may be used if *A fumigatus*-specific IgE levels are not available.

[‡]*A fumigatus* specific IgE and IgG assayed using fluorescent enzyme immunoassay (Phadia, Uppsala, Sweden).

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