[LETTERS TO THE EDITOR]

Reply to "Benralizumab as a First-line Treatment for ABPA: Is It Really Indicated?"

Key words: allergic bronchopulmonary aspergillosis, benralizumab, bronchial asthma, triazole antifungal

(Intern Med 60: 2521, 2021) (DOI: 10.2169/internalmedicine.6952-20)

The Authors' Reply We read with interest the insightful comments by Agarwal et al. regarding our recent paper (1), "Successful treatment with benralizumab for allergic bronchopulmonary aspergillosis that developed after disastrous heavy rainfall in Western Japan." They suggested triazole antifungal agents as attractive alternative therapeutic options for allergic bronchopulmonary aspergillosis (ABPA) when glucocorticoid use was difficult, as evidenced by the results of their clinical trials (2, 3). However, we recognize that antifungal agents are not highly recommended and that they should be introduced only after carefully evaluating their desirable and undesirable effects and the individual patient's condition, as reported in a systematic review by Moreira et al. (4). Thus, triazole antifungal agent use for ABPA seems controversial at present. Therefore, we did not strongly recommend antifungal agents to our patient. However, as suggested by Agarwal et al., triazole antifungal agents may help prevent ABPA recurrence. In our case, the patient's living environment had not yet completely improved following the disaster, so she was probably still being exposed to the fungi. Nevertheless, benralizumab may be withdrawn in the future and replaced with triazole antifungal agents.

We avoided systemic corticosteroid administration in our patient because she not only refused it but also had mild diabetes and obesity, a condition that carried a high risk of adverse events (1). We believe that benralizumab administration was appropriate for the following reasons. First, she had bronchial asthma with accompanying eosinophilia, and the asthmatic symptoms were uncontrollable even with high-dose inhaled corticosteroid/long-acting β -agonist [fluticasone furoate (200 µg)/vilanterol trifenatate (25 µg)]. Anti-Th2 therapy was also indicated because of the uncontrolled asthma despite glucocorticoid administration, as noted by Agarwal et al. Although persistent fungal exposure after the

disaster might have caused the exacerbation, her asthmatic symptoms were poorly controlled, and eosinophilia was observed; hence, the efficacy of benralizumab was expected. Second, the asthmatic symptoms caused her pain and reduced her quality of life; therefore, these symptoms had to be promptly relieved. We considered it unlikely that antifungal agents alone could rapidly and dramatically relieve these symptoms. Benralizumab administration rapidly reduced the eosinophilia and helped achieve prompt symptom relief (5).

Nevertheless, these results are not generalizable because benralizumab may not be effective in all cases of ABPA. Furthermore, future research is warranted to determine whether benralizumab in combination with an antifungal agent or alone is more effective. More evidence is therefore required before benralizumab can be recommended for the management of ABPA.

The authors state that they have no Conflict of Interest (COI).

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