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Reply

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To the Editor

We thank Helbig and Kyrzcz-Krzemie¹ for their thought-provoking comments on our recent article describing 8 subjects with hypereosinophilia of undetermined significance (HE_{US}).² It is reassuring that their group has identified similar subjects. As they suggest, the requirement that our subjects be eosinophilic for 5 years was selected not because we believe that it takes 5 years to make the diagnosis of HE_{US} but because we wanted to maximize the chances of finding biomarkers or clinical features that might distinguish HE_{US} from hypereosinophilic syndrome (HES). Despite these stringent criteria, however, we found no laboratory features that clearly distinguished HES from HE_{US}. The lack of biomarkers that predict a benign outcome coupled with the fact, as pointed out by Helbig and Kyrzcz-Krzemie, that HES has been reported to occur after a prolonged period of asymptomatic eosinophilia reinforce our recommendation that patients with HE_{US} be monitored closely for the development of clinical manifestations of eosinophilia.

With respect to the high percentage of subjects with HE_{US} with CD3⁺CD4⁺T-cell populations detected by flow cytometry in our small cohort, we agree that this was somewhat surprising. In fact, the numbers of aberrant T cells were quite low in all 3 subjects with HE_{US} (<3% of circulating lymphocytes) and have not increased over time. Because the significance of these small populations of cells in driving the eosinophilia is not entirely clear, we prefer to classify these subjects as HE_{US} until more data are available.

Unfortunately, the most important point raised by Helbig and Kyrzcz-Krzemie is also the most difficult to address. We have followed 1 asymptomatic patient with an absolute eosinophil count of 38,000/mL without treatment. However, he did not meet the 5-year criterion for inclusion in this study. No specific etiology was identified, and the eosinophilia resolved spontaneously after 6 months. As with all our patients, the potential risks and benefits of corticosteroids were discussed at length and the patient was monitored monthly for the development of symptoms or signs of eosinophil-mediated tissue involvement. Despite the good outcome in this patient, we do not recommend routinely withholding treatment in asymptomatic patients with high-grade peripheral eosinophilia but suggest that the risk-benefit ratio may not be the same in these patients as in those with clinical manifestations. This is particularly important when low-dose corticosteroids are not sufficient to control the eosinophilia.

References

1. Helbig G, Kyrz-Krzemie S. Idiopathic, asymptomatic, and durable blood hypereosinophilia—still many unknowns. *J Allergy Clin Immunol.* 2014; 133:932–3. [PubMed: 24439081]
2. Chen YYK, Khoury P, Ware JW, Holland-Thomas NC, Stoddard JL, Gurprasad S, et al. Marked and persistent eosinophilia in the absence of clinical manifestations. *J Allergy Clin Immunol.* 2013 Aug 26. Epub ahead of print. 10.1016/j.jaci.2013.06.037