In Reply

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Disclosures of potential conflicts of interest may be found at the end of this article.

We appreciate the findings presented by Hubiche et al. [1], which further support our hypothesis that geographic tongue is a novel entity related to bevacizumab therapy. Based on the occurrence of similar mucosal lesions in three patients reported by Hubiche et al. who were treated with multikinase inhibitors sorafenib and sunitinib (which have activity against angiogenesis), geographic tongue in some patients may in fact be related to therapeutic blockage of the vascular endothelial growth factor (VEGF) pathway. Of note, three of our four cases and the three patients reported by Hubiche et al. all had symptomatic lesions, which included dysgeusia, burning sensation upon exposure to spicy foods, or painful tongue lesions. Given that the majority of affected patients are asymptomatic, it is possible that symptomatic geographic tongue in association with VEGF blocking agents may be underreported.

These findings underscore the notion that physicians should be aware of this mucosal adverse event that has now been associated with anti-VEGF antibodies, as well as small

molecule multitargeted kinase inhibitors. These findings further support careful examination of oral findings in patients treated with agents that block the VEGF pathway. The reported frequencies of grade 1 or 2 stomatitis in patients receiving sunitinib and sorafenib are 17%–25% and 11%–38%, respectively. In addition, patients treated with sorafenib have reported oral adverse events, such as taste alterations and tongue pain, in up to 39% and 14%, respectively [2]. Given the wide range of incidences of oral adverse events, including geographic tongue, to targeted anticancer therapies affecting the VEGF pathway, larger prospective studies will allow improved classification and potential management strategies to minimize this untoward event.

DISCLOSURES

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