

## Correspondence

### Reply

*To the Editor:*

I wish to thank Dr Miller et al<sup>1</sup> and Dr Guarneri<sup>2</sup> for sharing their extensive experience regarding the practice of allergen immunotherapy.<sup>1,2</sup> With any procedure, there is always risk. The purpose of reporting a retrospective and prospective experience was to better determine the risk for a common practice (ie, aspiration before injection) that is currently recommended for allergen immunotherapy based on expert opinion only.<sup>3</sup> As discussed by Dr Guarneri, there is a lack of literature regarding syringe aspiration, both perhaps because of publication bias or, in our reported experience, the absence of reportable events.<sup>2,4</sup>

I agree that syringe aspiration is easy to learn and generally well tolerated by patients. Before changing our clinic policy, syringe aspiration before injection was always performed for both routine immunizations and allergen immunotherapy. However, coupled with the Advisory Committee on Immunization Practices guidelines regarding aspiration and routine immunizations, the decision to share my experience was based on both a lack of published data regarding syringe aspiration and a discussion with multiple experienced allergy technicians whose cumulative experience had not resulted in blood seen in the syringe before allergen immunotherapy injection.<sup>5</sup>

However, the responses of both Dr Miller et al and Dr Guarneri, although informative provide no details beyond the report of 2 instances each in which blood was observed during aspiration.<sup>1,2</sup> For instance, how many allergy shots were given over a 30-year period? How is the effort-to-benefit ratio determined? What size needles were used? Was there movement between needle insertion and aspiration?

Intravenous administration of an allergy shot could theoretically result in rapid anaphylaxis, but near-fatal and fatal anaphylaxis has occurred despite precautions,

including aspiration before injection. Since the policy change, there has been no difference ( $P = .75$ ) in the rate of anaphylaxis with needle aspiration (61/31,927 [0.20%]) and without aspiration (8/5032 [0.16%], unpublished data). Individual providers differ in their own comfort level and personal experiences regarding the approach to immunotherapy (eg, dosing schedule, local reactions, extract concentration,  $\beta$ -blockers, patient age, and asthma severity) and might still elect to aspirate before injecting despite data and current immunization policies suggesting injection without aspiration remains a safe practice.<sup>4,5</sup>

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