

Correspondence

Reply

To the Editor:

We thank Dr Arkwright¹ for his interest in our study.² We found his results to be interesting and an important addition to our knowledge regarding the use of epinephrine for anaphylaxis in the community. However, we find it difficult to make direct comparisons between the studies because of the limited details presented in his brief commentary. Despite that, we should note that there are differences in the study populations and design that might account for his finding of a lower rate of treatment with epinephrine and additional doses of epinephrine compared with those seen in our study. Our study specifically focused on food-induced anaphylaxis; it is unclear how many children in his study used epinephrine for food-induced allergic reactions. Several of our patients received a second dose of epinephrine administered by a health care professional; his study does not clearly state how many children received a second dose of epinephrine to treat their reactions. Lastly, multiple food allergies were more prevalent in our younger population (median, 4.5 years), with cow's milk being responsible for one third of reactions in which a second dose of epinephrine was administered; the Manchester population comprised predominantly older children (median, 10 years) with peanut and tree nut allergies. Given the ubiquitous nature of milk, having a cow's milk allergy and multiple food allergies might be important risk factors for requiring additional doses of epinephrine.

The cost of prescribing 2 epinephrine autoinjectors to each child with food allergy is substantial, and having additional doses available (eg, schools and relative's homes) adds to these costs. There can be circumstances when prescribing additional doses might not be necessary, such as having 2 doses per allergic child in schools where multiple doses are already available.³ Our study (and presumably that of Dr Arkwright) reports on children

residing in an urban setting for whom access to care is not a limiting factor, which might not be the case for persons in more rural settings or when families are traveling away from urban settings. Although it is encouraging that most children reached medical attention before receiving the second dose of epinephrine, we still believe further studies are necessary before concluding that a single epinephrine autoinjector is sufficient for each child with food allergy. Additional reports, like ours and that of Dr Arkwright, and studies identifying risk factors and biomarkers of anaphylaxis will be important to establish rational approaches to prescribing epinephrine self-injectors.

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REFERENCES

1. Arkwright PD. Automatic epinephrine device use in children with food allergies. *J Allergy Clin Immunol* 2008;■■■:■■■.
2. Järvinen KM, Sicherer SH, Sampson HA, Nowak-Węgrzyn A. Use of multiple doses of epinephrine in food-induced anaphylaxis in children. *J Allergy Clin Immunol* 2008;122:133-8.
3. Norton L, Dunn Galvin A, Hourihane JO. Allergy rescue medication in schools: modeling a new approach. *J Allergy Clin Immunol* 2008;122:209-10.

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