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Correspondence

Epinephrine shot in kiwi anaphylaxis—yes but not yet☆☆☆

To the Editor,

We read the case report of Zhu et al [1] with great interest. Kiwi is an exotic fruit and has gained popularity in domestic markets of many countries now. Because of its wide availability, various forms of allergic reactions to kiwifruit ranging from localized oral allergy syndrome to life-threatening anaphylaxis were reported. Three allergens have been described in green kiwifruit so far, and several more await discovery. Moreover, it is also recognized as part of the “latex-fruit syndrome,” and cross-reactivity has been confirmed [2].

In the case reported [1], the authors had not used epinephrine, which is the cornerstone of anaphylactic shock treatment. All advanced life support courses have put anaphylaxis into focus for emergency care providers, and it is highlighted as a “peri-arrest” condition, in which on-time treatment may avert cardiac arrest [3]. Use of medications such as antihistamines, glucocorticoids, and β -agonists, either alone or in combination, is considered next to epinephrine. Practitioners shall remember that epinephrine has to be given intramuscularly for all types of anaphylactic reactions and the preferred site being vastus lateralis muscle. The subcutaneous route is no longer recommended in view of delayed absorption and decreased peak levels [4]. In addition, there are no absolute contraindications to use epinephrine in a true anaphylactic emergency. Adverse effects are extremely rare with correct doses injected intramuscularly.

If the authors had used epinephrine immediately after the onset of reaction, this patient might not have deteriorated. As it is an α -receptor agonist, it reverses peripheral vasodilation and reduces edema. Its β -receptor activity dilates the bronchial airways, increases the force of myocardial contraction, and suppresses release of histamine and leukotriene. Interestingly, it also attenuates the severity of immunoglobulin E-mediated allergic reactions by inhibiting the β -2 adrenergic receptors on mast cells [5]. Corticosteroids do not reverse the cardiovascular effects of anaphylaxis, and it should not be used in place of epinephrine.

Educational deficit regarding correct administration of epinephrine among physicians, regardless of seniority and specialty, was brought out by Droste and Narayan [6] recently. Hence, they have proposed a mnemonic for remembering the recommended treatment for anaphylaxis in adults as “A Thigh 500” for epinephrine into anterolateral thigh, 500 μ g [7]. We teach treatment of anaphylaxis to our students as ABC: A-Adrenaline (Epinephrine), B-Benadryl (antihistamine), C-Corticosteroids. The failure to use or the delay in the administration of epinephrine will exacerbate the anaphylactic shock

as reported in this case; there is a need to conduct clinical audit of cases treated for anaphylaxis and physicians and nurses be periodically trained on the management of anaphylaxis through continuous medical education programs and mock drills.

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