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Letter to the Editor

Epinephrine nasal spray 'Neffy': a novel advancement in the treatment of anaphylaxis

Sir,

Anaphylaxis is a severe, systemic allergic reaction characterized by rapid onset and potentially fatal outcomes if not treated immediately. It commonly results from exposure to allergens such as foods, insect stings, or medications. Recent studies indicate worldwide incidence to be approximately 46 cases per 100,000 population annually. Immediate administration of epinephrine is essential in preventing the escalation of symptoms, including hypotension, bronchoconstriction, and airway obstruction.[1]

Intramuscular epinephrine, typically delivered via auto-injectors (EAIs), is currently recommended as the first-line treatment for anaphylaxis. However, several barriers hinder its optimal use. Needle phobia, incorrect administration techniques, and delays in access to auto-injectors are common issues that compromise effective and timely treatment.[2] Additionally, the high cost of auto-injectors (for e.g. Epipen's approximate cash price is $650 for two auto-injectors.) and dosing inaccuracies due to user error further complicate their widespread adoption.[2]

To address these needs, ARS Pharmaceuticals, Inc. (ARS) developed an epinephrine nasal spray, Neffy (a triad of epinephrine, Intravail, and a unit dose spray), recently approved by the U.S. Food and Drug Administration (FDA). Epinephrine nasal spray offers an exciting alternative by utilizing the highly vascularized nasal mucosa for rapid drug absorption. The nasal administration of epinephrine through products like Neffy offers significant advantages, providing a needle-free, pain-free delivery method that enables rapid absorption and quick symptom resolution. Studies show that Neffy has a pharmacokinetic profile comparable to injection products, with receptor activation occurring as early as one minute after treatment, even under nasal congestion conditions. By eliminating the barriers associated with injections, such as needle phobia, Neffy encourages timely self-administration of epinephrine, reducing the risk of severe anaphylaxis and improving emergency response, making it a more accessible and user-friendly option.[3]

Moreover, Neffy's expected cash price of $199 for a two-pack inhaler device, with commercially insured patients anticipated to pay $25, presents a more affordable alternative, enhancing its accessibility compared to other treatments.[4]

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