

Explain How Epinephrine Nasal Spray Compares to Injectables

You'll hear buzz about **Neffy, the first epinephrine NASAL SPRAY for treating severe allergic reactions including anaphylaxis.**

We know that INJECTABLE epinephrine devices (*EpiPen*, etc) have been the go-to for decades. But many patients or caregivers fear needles, use these products incorrectly, etc...and shortages often crop up.

The thought is that a nasal form of epinephrine will reduce these barriers...so people don't delay or avoid lifesaving treatment.

Evidence suggests epinephrine 2 mg nasal spray achieves similar blood levels and increases in BP and heart rate as injectable epinephrine.

But be aware that this is in healthy patients NOT experiencing anaphylaxis...and real-world use of the nasal spray is limited.

Also point out that epinephrine 2 mg nasal spray is only approved for patients who weigh 30 kg (66 lb) or more. But a 1 mg dose for children who weigh 15 to 30 kg (33 to 66 lb) is being reviewed by FDA.

Plus absorption may be impacted by nasal polyps, nasal surgery, etc.

Continue to recommend an emergency epinephrine device based on patient preference, availability, and cost. The "best" choice is the one that patients and their caregivers are willing and able to use correctly.

Explain a 2-pack costs about \$710 for *Neffy*...\$620 for the talking *Auvi-Q*...\$300 for generic *EpiPen*...or \$250 for *Symjepi* prefilled syringes. But most manufacturers have co-pay cards or patient assistance programs.

Point out other differences. For example, epinephrine 2 mg nasal spray has a shelf life of 30 months from date of manufacture...but most injection devices are labeled with an expiration of 15 to 20 months.

The nasal spray is also less sensitive to temperature excursions. It can withstand temps up to 122°F...or be thawed if inadvertently frozen.

When you dispense epinephrine 2 mg nasal spray, train patients and caregivers on proper use. The single-use device is the same design as *Narcan* or *Imitrex* nasal spray...and contains enough med for 1 dose.

Educate to hold the device with a thumb on the bottom of the plunger and a finger on each side of the nozzle...insert the nozzle fully into 1 nostril...and press the plunger to give a dose.

Emphasize calling 911 when epinephrine is given...since symptoms can recur after the initial reaction. Advise giving a second dose of the nasal spray in the SAME nostril 5 minutes after the first dose, if needed.

See our resource, Emergency Epinephrine Devices, for more on how products stack up and to order demos. And get our Managing Anaphylaxis FAQ for tips on recognizing symptoms, performing follow-up, etc.

Key References:

- Ellis AK, Casale TB, Kaliner M, et al. Development of neffy, an Epinephrine Nasal Spray, for Severe Allergic Reactions. *Pharmaceutics*. 2024 Jun 14;16(6):811.
- Casale TB, Ellis AK, Nowak-Wegrzyn A, et al. Pharmacokinetics/pharmacodynamics of epinephrine after single and repeat administration of neffy, EpiPen, and manual intramuscular injection. *J Allergy Clin Immunol*. 2023 Dec;152(6):1587-1596.

Cite this document as follows: Article, Explain How Epinephrine Nasal Spray Compares to Injectables, Hospital Pharmacy Technician's Letter, October 2024

The content of this article is provided for educational and informational purposes only, and is not a substitute for the advice, opinion or diagnosis of a trained medical professional. If your organization is interested in an enterprise subscription, email sales@trchealthcare.com.

© 2024 Therapeutic Research Center (TRC). TRC and Hospital Pharmacy Technician's Letter and the associated logo(s) are trademarks of Therapeutic Research Center. All Rights Reserved.

-Ebisawa M, Lowenthal R, Tanimoto S, et al. neffy, epinephrine nasal spray, Demonstrates a Positive Efficacy and Safety Profile for the Treatment of Allergic Reactions in Pediatric Patients at-Risk of Anaphylaxis: Phase 3 Study Results. J Allergy Clin Immunol. 2024 Feb;153(2):AB371.

-Medication pricing by Elsevier, accessed August 2024.

Pharmacist's Letter. October 2024, No. 401001

Cite this document as follows: Article, Explain How Epinephrine Nasal Spray Compares to Injectables, Hospital Pharmacy Technician's Letter, October 2024

The content of this article is provided for educational and informational purposes only, and is not a substitute for the advice, opinion or diagnosis of a trained medical professional. If your organization is interested in an enterprise subscription, email sales@trchealthcare.com.

© 2024 Therapeutic Research Center (TRC). TRC and Hospital Pharmacy Technician's Letter and the associated logo(s) are trademarks of Therapeutic Research Center. All Rights Reserved.