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Clinical Newsletter for Telephone Triage Nurses

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KEY POINTS

- Intranasal epinephrine (neffy) is now available.
- This medication reduces barriers to early treatment of anaphylaxis and should improve outcomes.
- Look for STCC guideline updates regarding neffy with our 2025 annual release!

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Intranasal Epinephrine – New Anaphylaxis Treatment

Remember those triage calls where the caller is reluctant to inject themselves or their child with epinephrine because they aren't comfortable doing it and hate the idea of a shot? How about the older child with needle phobia who won't let their parent give them a shot? Ever had a call where the caller accidently injected their finger or thumb and not the patient's leg because the EpiPen was turned around? Now there is a new option for anaphylaxis treatment: intranasal epinephrine (brand name neffy). This product should help eliminate the problems mentioned above. The FDA approved this new drug in the fall of 2024.

It is initially approved for adult and pediatric patients above 66 pounds (30 kg). Each nasal applicator injects a single dose of 2 mg epinephrine in the nose. Neffy is prescribed in packs of two, so a second dose can be administered in 5 minutes if needed. Clinical trials show the epinephrine blood concentrations are similar between intranasal and injectable products.^{1,3,7}

Benefits of Epinephrine Nasal Spray

- Better compliance from callers with a nurse's instructions to give epinephrine now in the event of anaphylaxis. Since it's needle-free, its availability should remove any hesitancy in giving it.
- Early easy treatment will save lives and help decrease the severity of anaphylactic reactions.
- Simple delivery system, with not much chance for error with medication delivery. This is unlike the current EpiPen or other auto-injectors.
- Expiration date is longer than the intramuscular (IM) medication. (30 months versus 12-18 months for auto-injectors)
- Smaller product makes it easier to carry than the EpiPen or other auto-injectors.
- Potency and effectiveness is maintained in extreme heat (up to 122 degrees Fahrenheit) and cold, unlike auto-injectors.

Epinephrine Nasal Spray - How to Give

- Use the right hand to administer neffy to the right nostril OR use the left hand to give it in the left nostril.
- Do NOT prime or test the spray.
- Insert the spray nozzle fully into the nose (until your fingers touch the nose).
- Hold the spray straight in the nose. Do not angle the spray.
- Press the plunger firmly with your thumb.
- Avoid sniffing during or after receiving the medication.
- If a second dose is needed (symptoms worsen or not improving), give a new spray in the same nostril 5 minutes after the first dose.

Intranasal Epinephrine Precautions

Since neffy requires healthy nasal mucosa to have effective absorption, it is unclear whether or not allergic rhinitis or nasal congestion will interfere with the medication's effectiveness. However, "initial clinical studies were done on people with allergic rhinitis symptoms such as nasal congestion or runny nose. The results showed similar levels of epinephrine in people without those symptoms." ¹ Also, a small study in adults with upper respiratory tract infections also found that epinephrine absorption was similar in healthy adults without symptoms.⁴ More larger scale studies will be needed. Uncommon nasal conditions, such as nasal polyps or nasal surgery, may also affect the absorption of neffy. These patients should decide with their doctor which epinephrine product would work best for them.

Give Epinephrine Early

Per STCC's Anaphylaxis guideline, prehospital epinephrine (epi) treatment is associated with decreased rates of observation, admission, and decreased morbidity. We know some callers are hesitant to give a shot of epi due to fear of injection or needles. They should be told that if there is any possibility of an anaphylactic reaction, they should give the epi immediately. In addition, if the patient has had a life-threatening reaction in the past and now has been re-exposed to the same allergic substance (e.g., food or bee sting), they should give epi BEFORE they develop symptoms. That's why epi was prescribed. Delay in giving epi is common despite the above recommendations to use it early in case of anaphylaxis. In an older study looking at fatal anaphylactic reactions, epi was used in treatment of 62% of fatal reactions, but before arrest, in only 14%.⁵ Neffy should reduce current barriers to early treatment of anaphylaxis and decrease risk for mortality.

Summary

Intranasal epinephrine represents an exciting new innovation for anaphylaxis treatment. The Allergy and Asthma Network has a free chart that compares the current various epinephrine treatments: (<u>https://store.allergyasthmanetwork.org/digital-downloads/epinephrine-treatments-download</u>). It may be a helpful resource for your call center, office or callers. Today, neffy is a treatment option that has potential to positively impact those people who live with severe allergic reactions.

Telehealth nurses should be prepared to take calls from patients who are using this new product. As with IM epinephrine, after administering intranasal epinephrine, the patient should be evaluated in an ED.

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