



Guidelines for treating epistaxis

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Disclaimer: This is not medical advice unless your physician has specifically given this to you as an active patient.

Below are some notes for providers treating epistaxis.

Main factors promoting epistaxis:

1. Blood “thinners”
2. Hypertension
3. Trauma
4. Dry air
5. Infection

Here are my general suggestions for managing epistaxis:

1. Determine platelet function and coagulability status. Consider correction of an underlying factor preventing clotting.
2. Treat hypertension. Epistaxis is *very* dependent on blood pressure. Pain and anxiety often elevate BP. Shoot for a systolic pressure of 130 mm Hg or less to control epistaxis.
3. Vasoconstriction: Application of a topical alpha agonist vasoconstrictor (e.g., oxymetazoline (Afrin) or Phenylephrine (Neosynephrine) are extremely helpful in managing epistaxis. Contraindications include pregnancy (out of concern for myometrial contraction). Use in children and hypertensive patients, while theoretically relatively contraindicated, is commonly performed with good effect and no problems. Prophylactic oxymetazoline or neosynephrine use should be stopped after 3 days. I typically advise use as 2 sprays BID x 3 days AND prn epistaxis.
4. Pinching the nose: Since ~90% of epistaxis occurs from the anterior nose, taking advantage of the ability to apply pressure to the bleeding mucosa by pinching the nostrils against the septum is often effective. Pinching the nostrils and tilting the head forward may also allow a clot to form, with all of its pro-coagulant proteins activated, and the clot may propagate posteriorly.
5. Post-operative epistaxis will be addressed below.
6. Packing the nose will be addressed below.

Post-op:

After nasal surgery, the surgeon may have placed Doyle splints (figure 1). These silicone splints are shaped like a “d” in the right nasal vault and like a “b” in the left nasal vault. The flat surface applies pressure to the septum, which is therefore a less likely source of bleeding when Doyle splints are in place. Spraying oxymetazoline (Afrin) or phenylephrine (Neosynephrine) effectively involves directing the spray lateral to the splint, as shown in figure 2.



Figure 1. Doyle Splints. These are often used by ENT surgeons after septoplasty or other nasal surgery. They are typically sewn together through-and-through the septum anteriorly with one stitch.

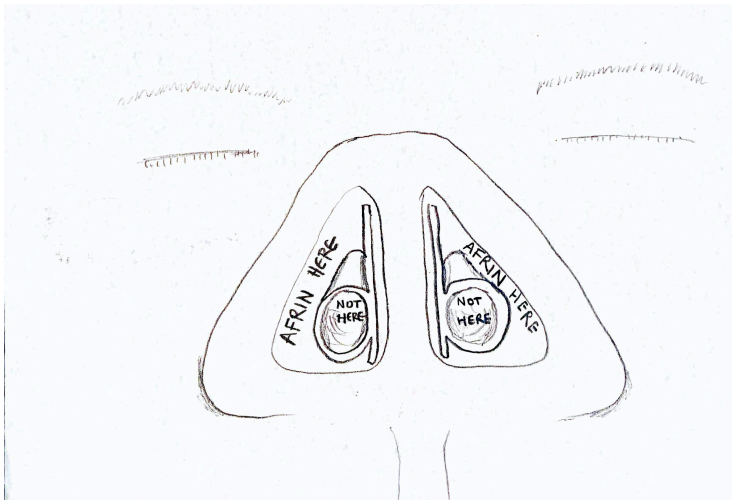


Figure 2. Where to spray the topical vasoconstrictor. In this schematic, you are advised to direct the vasoconstrictor spray lateral to the Doyle splints. In other words, spray the vasoconstrictor between the nostril and the splint, not in the tunnel of the splint.



Figure 3: Spray bottles of the type shown form a stream when pointed downward and a fine atomized mist when pointed upwards. In the setting of epistaxis, a stream may be more effective—extending the neck and lifting the nose can allow the tip of the bottle to be placed in the nose while maintaining a downward angle.

Packing:

The most common error in packing a nose is incomplete placement of the pack. Here are my tips for packing a nose well. Do not pack a nose if Doyle splints are in place.

1. Use Rapid Rhino packs. I typically prefer the ones with a balloon. Dip the pack in sterile water, not saline, before use.
2. Inform the patient that it will hurt for a moment. You may choose to use cetacaine or other analgesic if you wish.
3. In one quick motion, slide the pack in completely. Direct the pack **horizontal** to the palate, not parallel to the nasal dorsum. Do not use enough force to break a turbinate, but you might be surprised at how much force you can apply safely.
4. I prefer to inflate the balloon with air, which is a little softer due to compressibility than water. The air also diffuses out of the balloon slowly over the next several days.
5. The typical timeframe for unpacking is in 5-7 days. The risk of toxic shock syndrome is low enough that prophylactic antibiotics for nasal packing is not recommended. Unpacking is rarely successful 5-7 days later if a patient continues to have “thin” blood or remains hypertensive.