Here are some suggestions for general nasal care in children with nasal discharge from upper respiratory infection (URI), sinusitis and post-operative patients from tonsillectomy, adenoidectomy and sinus surgery. Instructions for epistaxis (nose bleed) not related to a surgery are also listed below.

**Saline (saltwater) Irrigation**

- You can either make your own nasal saline irrigation or purchase an already made solution. Ocean Mist®, Ayr® pump spray or a high quality contact lens wetting solution such as Bausch & Lomb® can be purchased to irrigate the nose. Contact lens solution is buffered salt water made gently for the eyes, so it is less irritating and can be used safely in the nose.

- The following recipe will assist you with making your own nasal saline irrigation solution:
  - **Makes 1 pint:**
    - **Ingredients:** 1 pint clean warm (not hot) water, 1 teaspoon baking soda, 1 teaspoon non-iodized table salt.
    - Mix the ingredients together and store in an air tight container. You may save the mixture for up to one week.

- DO NOT use contact lens CLEANING solution in the nose.

- Saline solution can be vigorously flushed into each nostril. This can be applied from a squirt bottle, baby bulb aspirator or product bottle. There are a variety of over the counter squeeze bottles, kits, and “Netty pots” that are available for home use. Your child may sneeze or cough (this is expected). Remember, the more vigorously you can flush, the more you will be rewarded by improved cleaning and nasal breathing. This can be repeated several times a day when there is a lot of mucous discharge and can be especially valuable in early AM and before bedtime applications. Nasal saline irrigation can be performed before and/or several minutes after nasal decongestant spray usage.

- Saline should not be used after nasal steroid spray (Flonase®, Rhinocort®, Nasacort®, etc.) application. You can use the saline irrigation prior to nasal steroid spray.
**Nasal Decongestant Spray**

- Afrin 12 hour or generic oxymetazoline 0.05% can be an effective decongestant in some situations. For smaller children you can dilute the Afrin 50/50 with nasal saline.

- Afrin will open the nasal passages within a few minutes providing immediate relief of nasal congestion. This can be especially helpful at bedtime to allow nasal breathing, and better quality, more comfortable rest.

- Afrin is applied as 1-2 squirts to each nostril. Repeat application in 5-10 minutes will further decongest the nose if the first dose is ineffective.

- Saline nasal irrigation after Afrin® application can be very helpful to remove plugged debris and mucous.

- Afrin® and related products should be used infrequently, no more than twice a day for 2-3 days. Afrin® and other decongestant sprays can cause rebound congestion, i.e. addiction to the ingredients making it worse. For young children, Afrin can be diluted 50/50 with nasal saline.

- Neosynephrine® is NOT recommended due to potential cardiac/heart rate effects.

- There are newer decongestant nasal sprays related to Afrin (Patanase, Astelin, Astepro) that may be prescribed for your child.

- Infant Afrin® is a different medication than “regular strength” Afrin® and is NOT recommended.

**Nasal Steroid Sprays** (Flonase®, Veramyst®, Rhinocort®, Nasonex®, etc.)

- Nasal Steroids such as these can be a very effective means to reduce nasal congestion and post surgical swelling. They are anti-inflammatory and not addictive agents.

- If you have been instructed to use nasal steroids, you must take them every day to obtain maximum benefit. Nasal steroids usually take 1-2 weeks to be fully effective, please be patient. The physician will outline an appropriate trial for usage. You should not start and stop usage on your own, especially after obtaining relief from congestion. Even with a cold or upper respiratory infection they will be somewhat effective.

- They are safe at doses recommended because they are topical/local medications and are not absorbed into the body.

- There is less absorption of these preparations of steroids than commonly used asthma steroid inhalers.

- They do not, however, provide immediate relief from congestion like decongestants such as Afrin®.®
Nasal steroid sprays are usually once-a-day applications of one or two squirts in each nostril as the patient sniffs in. If the first squirt is effective, the second may not be necessary. The spray should be directed into the nose, with the applicator tip inside the nostril directed at an angle parallel to the floor of the nose, slightly upward, not toward the eye or the ear. The patient should feel the gentle effect of the cool spray deep into the nose. Avoid bumping the walls of the nose with the applicator – minor trauma (bleeding) sometimes will occur.

Nose Blowing

- Even young children can blow their nose with some simple coaxing and rewards. Blowing the nose can be very effective in cleaning secretions/mucous from the nose and minimize the need for other medications.

- A couple of simple instructions may help even a reluctant child learn the fine art of nose blowing. First, try having the child blow a tissue held in front of the face with the mouth – simple in and out – so they can see the tissue flop in the breeze. Then switch to blow air in the mouth and out the nose. You can occlude one nostril and blow through the open nostril, then switch nostrils and repeat. The more the tissue moves the greater the reward.

Miscellaneous

- Vaseline®, Bacitracin® or Polysporin® (do not use with neomycin allergy). ointment can help with nasal irritation, crusting or chaffing in the front of the nose. Apply with a Q-tip and apply liberally, but only a half-inch or the depth of the head of the Q-tip (just coat the inside rim of the nose). This will moisturize and lubricate the front of the nose and help keep secretions from sticking, causing less irritation or itching.

- The above mentioned products are available from your pharmacy as a prescription (nasal steroids) or over the counter (saline spray, Afrin®). If you need further instructions, please consult your pharmacist. Pharmacies offer information about medications and usage.

Epistaxis /Nasal Bleed (Not after Surgery)

- Nasal bleeding may occur for multiple reasons including trauma, scratching, or drying of the nasal membrane. It is important to keep the nose moist and free of irritants.

- To stop a nasal bleed apply pressure to the nostril that is bleeding. Do not bend your head backwards as blood can run down the back of your throat and cause stomach upset. Keep your head elevated. Do not lie down. You may also saturate a cotton ball with Afrin and place the cotton ball in the nostril that is bleeding. Lightly compress the nostril for 2-3 minutes, then remove.

- Keeping the membrane moist will help prevent future nasal bleeding. Apply a glob of Vaseline or antibiotic ointment such as Bacitracin or Polysporin to a Q-tip. Coat the inside rim of both nostrils with the ointment 1-2 times per day.
• Consider using a humidifier in your home to keep moisture in the air, especially when using a heater.
• If active nasal bleeding can not be stopped despite measures described above call our office or your pediatrician. You may need to be evaluated by a healthcare professional.

These are general recommendations and representations, and may not be appropriate for every individual, patient, or situation. For any questions please consult with your physician. If you have any questions, concerns, or problems, please don’t hesitate to call our office at (904) 398 –KIDS (5437).

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