A guide to managing your HEAD COLD (acute sinusitis)

This article helps address common sinus issues. Understanding how various treatments work and improving your technique often enables people to manage their condition without needing to see a doctor.

1. **What are sinuses?**
   Sinuses are large air pockets in the skull. There are large ones around the cheeks (diagram – see Maxillary sinuses) and above the eyebrows (see – Frontal). There are also some small ones between the eyes and nose (Ethmoidal).

2. **What is acute sinusitis?**
   An increase in blood flow to the nose causes swelling of sponge like tissue (called conchae, on the second diagram) which block the sinus openings. Mucus trapped in the sinus builds pressure causing pain/fullness and may turn from clear to yellow or green (purulent). Acute sinusitis is often triggered by a viral infection, though exposure to allergens (for example, dust mites and pollen) and irritants (i.e. chlorine, wood dust) often play a part.

3. **What are the symptoms?**
   Usually a headache (commonly felt around the forehead, behind the eyes), it can also cause pain in the ears, around the cheekbones and even in the teeth. Sinusitis can also cause a light headed sensation, particularly when bending down.

4. **How is it treated?**
   **Tip 1: The most important therapy is effective decongesting.**
   Decongestants come as tablets (the ingredient is called phenylephrine - please ask your pharmacist which one is right for you), sprays (such as Otrivin) and inhalations (such as menthol). They reduce mucus secretion (dry you up) and shrink the swollen conchae (let you breathe more easily). Sinuses are decongested only when facial fullness/pressure/pain improves. This happens when the conchae pressing against the opening of the nose shrinks back enabling air to enter and mucus to drain.

   **Tip 2: You can’t beat a good spray technique**
   When using the spray: bend your head forward with your face parallel to the floor, aim the spray vertically (toward the back of your head). Immediately after spraying lie back with a pillow under your neck, extending your head slightly below horizontal – this gets the spray migrating over and under the conchae of the nose. Allow 5-10 minutes for this to work. The first spray often only shrinks back the lower concha, but the sinuses drain under the middle and upper conchae so: most of the time a 2nd or 3rd spray is needed.

   **Tip 3: Be consistent with the decongestant.**
   The decongestant needs to keep your sinuses open whilst you ride out the storm. If the flow of mucus is blocked, bacteria start multiplying which worsen the situation from within the sinus. Do not use decongestants for more than 5 days, as there is a risk of rebound swelling when stopping.
Tip 4: Use the saline rinse
Salt water rinsing dislodges dry mucus from sinus openings, and can enter the sinus to loosen up thickened mucus. Hypertonic solution kills bacteria and is useful if your nose normally feels more full or blocked after rinsing. Rinsing when the concha is swollen won’t access the sinus opening - RINSE AFTER EFFECTIVE DECONGESTING. The more purulent and copious the mucus, the more sinus rinsing will help. See rinse recipe below.

Tip 5: Look for your triggers
While viruses normally trigger events, people suffering repeated sinus issues normally have a background problem - if you find that and manage it, viruses tend to pass people by as a normal cold. If your issues are always on one side an examination by your GP is important.

Tip 6: Treat / manage the background issue
You need to be managing background inflammation BEFORE the virus comes along. Take antihistamines at the right time (before bed for dust mite allergy, at the start of the day for pollen allergy). Sinus rinse AFTER irritant exposures to flush them out of the nose. Nasal steroid sprays (flixonase, butacort) are helpful for treating both allergy and irritants. If you are congested, use the steroid spray AFTER effective decongesting or it won’t reach where it needs to. If you get nosebleeds, ask your GP on how to manage these.

If you are still experiencing facial pain and/or pressure with decongestants or you are still needing to use them after 7 days - seek help: you may need to consider tablet steroids +/- antibiotics. Antibiotics do not help unless mucus has been purulent for several weeks.

This side view of the nose (from the inside out) shows the conchae folds and how far back they sit.
5. **Saline Sinus Rinse Recipe and instructions**

Saline sinus rinses can bring relief to patients with chronic sinus or rhinitis problems without the use of medication. If you suffer from chronic or acute sinus infections, sinus rinses can be helpful in removing and thinning out excessive mucus. If you have allergic rhinitis, these rinses can bring relief by removing allergens from the nostrils and sinuses. Although easy to use, the rinsing process may seem unusual at first and may take a little getting used to.

Several commercial sinus rinse devices are available without a prescription. They are convenient to use and can be found in most pharmacies. But you can also make your own rinse at home with only three ingredients and at a fraction of the cost.

**Saline Rinse Recipe – Ingredients**

1. Pickling or canning salt - containing no iodide, anti-caking agents or preservatives (these can be irritating to the nasal lining)
2. Baking soda
3. 1 cup of lukewarm distilled or boiled water

In a clean container, mix 3 heaping teaspoons of iodide-free salt with 1 rounded teaspoon of baking soda and store in a small airtight container.

Add 1 teaspoon of the mixture to 1 cup of lukewarm distilled or boiled water.

Use less dry ingredients to make a weaker solution if burning or stinging is experienced. For children, use a half-teaspoon.

Using a soft rubber ear bulb syringe, infant nasal bulb or a commercial nasal saline rinse product from your drug store (NeilMed sinus rinse kit is good), use the rinse by following these steps:

1. Draw up saline into the bulb. Tilt your head downward over a sink (or in the shower) and rotate to the left. Squeeze approximately 4 ounces of solution gently into the right (top) nostril. Breathe normally through your mouth. In a few seconds the solution should come out through your left nostril. Rotate your head and repeat the process on the left side.
2. Adjust your head position as needed so the solution does not go down the back of your throat or into your ears.
3. Blow your nose very gently to prevent the solution from going into your ear and causing discomfort.

• After using the rinse, you may continue using your prescribed nasal medications as normal. You may notice that they work better.

If having difficulty with above try this - Take a deep breath, then squeeze the bottle while saying, "kay kay kay kay." Use one bottle per nostril in the morning before nasal sprays and evening. Do not use right before bedtime, please allow 30 minutes to drain completely. Look down at the ground after blowing the nose to allow excess water to drain. There is no need to squeeze the bottle forcefully, and take time to clear/pop the ears.

When sick with a cold, use more frequently (i.e in the morning and dinnertime). Do not use sinus rinses if your nasal passageway is severely blocked. Stop using if you experience pain, nosebleeds or other problems.