Sinonasal Irrigations

Irrigating (rinsing) the nose and sinuses with salt water (saline) or medicated rinses can be very helpful to lessen or prevent nasal blockage and nasal drainage, decrease inflammation (swelling) and treat infection. There are many different types of irrigation devices, irrigation solutions and techniques.

Irrigation Device
Irrigations may be carried out with a Neti pot, Neil Med squeeze bottle or a Neti Rinse (syringe). Your doctor will recommend a specific type of irrigation device depending on your needs.

Keeping the irrigation system clean and free of contamination to prevent re-infection is an important part of proper nasal and sinus rinses. You should clean your irrigation system daily. Some devices may be washed in a conventional dishwasher (on the top shelf only). Hand cleansing may be performed with a weak solution of Betadine (available in pharmacies) or bleach (1 part bleach to 100 parts water). After cleansing, rinse the device a few times with sterilized water or saline before using again.

Irrigation Solution
Straight tap water can become a source of bacterial contamination and therefore distilled water is advised in its place. You may make your own salt water if you are willing to take the time. If you would like to learn how to make your own salt water, see our supplementary handout for our Homemade Irrigations.

Prescription Irrigations
These can include steroids (Budesonide and Mometasone), antibiotics (Mupirocin, Gentamicin, Tobramycin, Ceftazidime) or antifungal agents (Fluconazole, Amphotericin-B). These are best filled by a compounding pharmacy. Your insurance may dictate where irrigation prescriptions should be filled and whether or not it is covered.

Irrigation Technique:
The best techniques vary depending upon whether or not your sinuses have been previously opened by surgery. Do not speak or swallow during irrigations. This can change the pressure in your ears and nose causing infectious mucus to be drawn into the sinuses or middle ear.

Patients without prior surgery - Neti Pot Style:
In people who have not previously had sinus surgery the best method of rinsing is described the Neti pot technique. You can watch the video on how to properly use the Neti Pot at http://www.oprah.com/slideshow/oprahshow/slideshow1_ss_oz_20070426/6.
The goal is to rinse both nasal cavities through one nostril by having a gentle continuous flow of saline solution pass from one nostril to the other. It is awkward until you get used to it. To keep the solution from running into your mouth, breathe continuously through your mouth.

1. Fill your irrigation device with saline or other irrigation solution.
2. Lower your head over a sink. Turn your neck so your left nostril is down.
3. Keep your nose slightly higher than your mouth.
4. Pour solution from the container into your RIGHT nostril.
5. Water will drain from your left nostril into the sink.
7. Repeat the same process for the other nostril.

Patients with prior sinus surgery - “Pirouette Technique:”
Hold your breath before starting to prevent coughing. Hold on to the edge of the sink/shower with one hand so you do not lose your balance while rotating your position. You will be trying to create a slow continuous sweeping rotating motion that will move the solutions around into and out of your sinuses.

To irrigate your sinuses:
1. Fill your irrigation device with your irrigation solution.
2. Lean forward at the waist and turn your head and shoulders counter-clockwise (to your right with right shoulder up).
3. Your left ear and left shoulder should be pointing to the ground (drain of the sink/shower) with your nose slightly pointing up.
4. Flush the solution into the left nostril while holding your breath.
5. Then gradually rotate (swing) your shoulders and head back and to the left (counterclockwise) in a circular motion. This will help rinse your maxillary sinus.
6. Gradually bring your back, shoulders and head upright while continuing to move counterclockwise.
7. Once you reach the standing upright position your head should be tilted back (so that your face is point towards ceiling).
8. Then continue the same direction of rotation with your head and shoulders back down and forward and so that your right ear is now facing the drain of the sink/shower. This will help empty your left maxillary sinus. Irrigation may come from 1 or both nostrils. Depending on the shape of your nasal airway this maybe easier to complete on one side.
9. Repeat these steps in the opposite direction to flush the right nostril.

Frontal Sinus technique – “Head Upside Down Technique:”
After rinsing, there will be a residual amount of irrigation inside your sinuses. The goal is to keep this solution inside your nose and make it go into your frontal sinuses.
After doing the Pirouette technique, do the following:

1. Lie down on your stomach on your bed with your head bent forward and down. The top of your head should be pointing towards the floor. An alternative position is to kneel down with your forehead on the floor.
2. Remain in this position for 2-5 minutes.
3. Afterwards, be sure to reposition yourself lying flat on your back for at least one minute with your head resting on a pillow.
4. Then gradually sit up to avoid becoming dizzy or lightheaded.

Potential Side effects:
Although typically very well tolerated, some side effects can occur. These include nasal bleeding, swelling, a burning sensation, headache, ear symptoms, and coughing. Some people unintentionally get the irrigation solution into their middle ear through their Eustachian tube. Altering head positioning and breath-holding can prevent this. This is usually discovered through individual trial and error. Should fluid get into your Eustachian tube, you may experience a temporary annoying sensation of ear fullness, popping or clicking.

Should you develop change in hearing, ringing in your ears or changes in balance associated with your nasal washes you should discontinue irrigations and contact your physician. This is a particular concern with certain medicated rinses - especially those with gentamicin or tobramycin.

Some irrigation solution will run out the front of your nose or down the back of your throat at the time of rinsing. This is normal. For some people the nasal irrigation can drain suddenly much later on and can be embarrassing or inconvenient (We call this a “reservoir sign”). Swallowing small quantities of the irrigation solution does not appear to be harmful as the amount of medicine that gets absorbed by your body is very small. Larger amounts can cause bloating or fullness in the abdomen.