Let the Nature Help your Nasal Problem
Sea water Nasal Application

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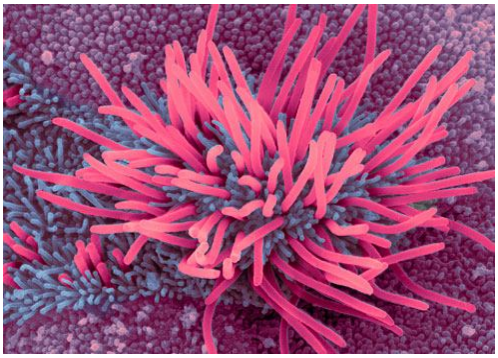
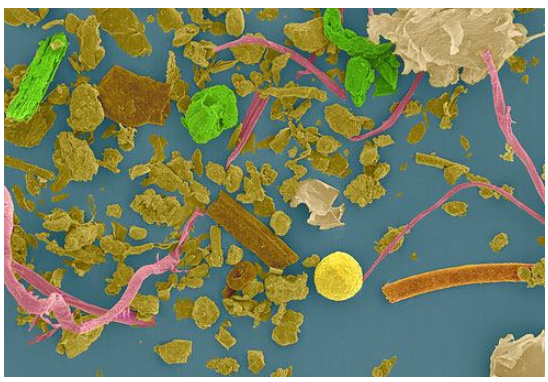
Introduction

The main function of the nose is to warm, clean and moisten inspired air. Tiny whiskers in the nose (the cilia) usually transport mucus and contaminants to the back of the throat, where they are swallowed or expectorated.[1,2]

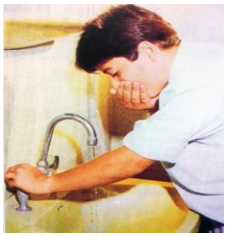
Frequently, this function is inhibited, for various reasons, e.g. air-conditioning units circulating germs and bacteria, central heating causing dryness, pollen dust & air-pollution leading to poor air-quality, smoking & medication, and the mucous membrane does not function anymore, which often leads to diseases and infections of the upper respiratory tract, leading to congesting, excessive mucous secretion & collection in the nasal passages ,crust formation making difficulty for the mucociliary activity of the already diseased mucosa to clean & washout the collected debris.[3,4]



Nasal irrigation or **nasal lavage** or **nose douche** is the personal hygiene practice in which the nasal cavity is washed using deferent type of solution, to flush out excess mucus and debris from the nose and sinuses, to moisten the mucus membranes. Promotes good nasal health, improves sinus-related quality of life, decreases symptoms, and decreases medication use. It is an effective adjunctive therapy[1-5]



Origin of nasal irrigation



The simplest method of nasal irrigation that is to sniff water from cupped hands and then blowing it out is the Sunnah part of the ablution (Wudu) done by Muslims before performing prayers for centuries.[5]

The Wudu is done usually five times a day before performing five daily prayers

An ancient Indian yogic cleansing technique, called Jala neti, involves nasal irrigation using a neti pot, a ceramic container resembling a tea pot. It is still done today in many parts of India and Southeast Asia and the practice is now done in North America, Europe, and Australia by health conscious people. the University of California, San Diego (USCD, San Diego[6].

What solution we should use:

Tab water, saline, Sea water

1. Nasal irrigation can be carried out using ordinary tap water, but this is generally felt to be uncomfortable because it irritates the mucous membranes Plain water, on the other hand, will tend to enter the tissues, thereby increasing swelling (edema.) When you sit for a long time in a bath, your fingertips wrinkle because the water content of the skin is increasing, so the skin must buckle to accommodate the extra water.[6]

2. or tap water warmed to around 98 degrees F / 37 degrees C, with or without inclusion of a buffering agent such as sodium bicarbonate to adjust the pH value to that of the body, Optional additives include xylitol , Isotonic saline (salt water that is about as salty as your body fluids)

Therefore an isotonic or hypertonic salt water solution is normally used, i.e. water with

enough salt to at least match the tonicity of the body cells.[3-8]

Hypertonic saline will tend to draw a small amount of water from the tissues it contacts; this is desirable if the tissues are swollen (edematous.)[6-9]

3. Some studies showed that California coast swimmers found that most of their nasal problems & congestion relieved after swimming in the sea, the same observations had been found in France, Swede, & other area of the world.

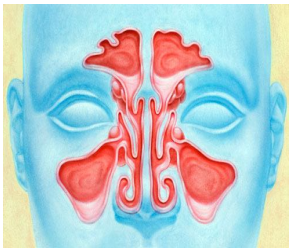
Sterile Natural isotonic & hypertonic Sea water was preferable on iso & hypertonic saline because. It contains other cations & anions that are similar to that found in the cells & interstitial tissues make it easier & more conformable for the tissues for osmolaritic changes. [10-13]

Mechanism of action:

The precise reasons for the efficacy of nasal irrigation are not well understood, although it is clear that the removal of mucus plays an important role.[7] Damage to the mucociliary transport system is an important factor in the development of sinonasal diseases, leading to a stasis of mucus.[8-19]

The numerous proteins found in nasal mucus include inflammatory mediators, defenses and many whose function is not understood. [9]

Thus hypotheses include that nasal irrigation may decrease inflammation through the removal of mucus, that it may improve mucociliary clearance, and that it may remove thickened mucus that cannot be handled by the cilia.[7-19]



In a study with eight healthy volunteers, solution was transported reliably to ethmoid and maxillary sinuses when it was snorted or applied with a squeeze bottle; a nebulizer was significantly less effective. Sphenoid and frontal sinuses were rarely reached, and not at all with the nebulizer.[14]

Another role is that irrigation dilutes the allergen and the bacteria decreasing their damage to the mucosa.[17]

Benefits of the sea water Nasal Douche & Cleansing Salt:

- Moistens nasal passages
- Washes out mucous, bacteria, pollen & dirt
- Removes scabs after endonasal surgery
- Reduces swollen & congested nasal and sinus tissue
- Supports & reactivates the function of the cilia
- Irrigations are simple to carry out
- Drug-free & Safe for children and pregnant women
- Easy to clean and very hygienic
- Reusable & can be sterilized

Start treating yourself with the sea water Products if you suffer from

- Allergies (hay fever, dust, pollen)
- Catarrh
- Chronic Infections
- Chronic nasal dryness & crusting
- Congestion
- Endonasal surgery
- Nasal Polyps
- HHT
- Post Nasal Drip
- Rhinorrhoea
- Rhinitis
- Sinusitis
- Sjoegren's Syndrome
- SNORING

Methodes:

1 Snort water from cupped hands.

2.This is an old yogic technique known as *jala neti*

3.Introduce some form of positive pressure to the water introduced into the sinuses and nasal cavities in order to provide a more complete rinsing without resort to special techniques,

a. neither squeeze bottles nor bulb syringes provide the user with any genuine control over the pressure/volume of solution introduced

b. Irrigation machines that utilize electric motor-driven pumps are also available. These irrigation devices pump salt water solution through a tube

c. Pressuried bottol containing sea water with deferent pressure jet.

Furthermore, a study by Adam et al.[19] showed that saline delivered via *nasal sprays* is ineffective in improving symptoms of those with the common cold or rhinosinusitis

Conclusion:

We conclude from these studies, and from a review of the scientific literature, that nasal irrigation is an effective adjunctive therapy for chronic sinus symptoms. It may also be effective as

adjunctive therapy for symptoms of other upper respiratory conditions that are risk factors for chronic sinus symptoms including acute upper respiratory infection (common cold), acute sinusitis, and allergic rhinitis

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Karbala Health directorate; MoH.