

Saline Nasal Irrigation

Saline nasal irrigation with an NETI pot is an age-old and time-tested technique used by millions of practitioners of Yoga over thousands of years in India. Its popularity is increasing all over the world in recent years. Many published articles in the recent medical literature confirm its many benefits. A recent survey among doctors in family practice in Wisconsin stated that 87% of the survey participants approved the use of saline nasal irrigation as an ancillary treatment for various upper respiratory diseases. Treatment guidelines in both Canada and the United States now favor the use of nasal irrigation for all causes of rhinosinusitis and for postoperative cleaning of the nasal cavity. In children with nasal allergy symptoms studies have shown that use of saline nasal irrigation is safe, effective, improves their quality of life and reduces the need for topical prescription nasal sprays. Pregnant women (in whom the unnecessary use of medications could harm the baby) who used saline nasal irrigation regularly reported significant improvement in nasal congestion and stuffiness in another study.

How does it work?

Saline nasal irrigation is believed to work in the following ways. It removes excessive mucus and dried up nasal secretions (common in dry climates). It helps in the removal of trapped allergens such as pet dander and pollen and irritants such as pollutants and smoke particles. A recent study showed that regular use of the saline nasal irrigation improves mucociliary clearance in the nostrils. The mucociliary clearance is measured by Saccharine Clearance Time- how long it takes to taste saccharine in the mouth after a drop of it is placed in the nostrils! The cilia are fine hairlike structures that project from cells lining the respiratory passages. They are bathed in a layer of mucus. This mucus helps to trap allergens and irritants in the inhaled air before it reaches the lungs. The cilia beat constantly like sea-waves in a well-coordinated manner and propel the mucus with trapped particles from the sinuses into nostrils and from the nostrils into throat where it can be swallowed or spat out. The saline nasal irrigation helps this!

How do you use saline nasal irrigation?

There are several ways of doing it. Some are traditional like NETI pot. Some modern variations available commercially are made of flexible plastic and can be squeezed to exert extra pressure. A bulb syringe can also be used instead. It is also possible to use an electric irrigation device, which pumps the solution through a flexible tube, with a nasal adapter. In the United States such devices are available for home use. The more expensive devices that produce a pulsating flow have been used in some studies, but their efficacy was not compared to the nasal irrigation methods that produce a steady flow through constant positive pressure. Pure water which is lukewarm and free of contaminating chemicals and bacteria and has 0.9% physiological salinity and is pH neutral is ideal to use. Some doctors recommend using hypertonic saline (3%) and others think the hypertonicity could be harmful to the cilia. Talk to your doctor first before making a selection of the technique and the solution to use. Follow the written instructions that come with such products carefully.

Are there any harmful side effects?

Not really! Remember the saline nasal irrigation has the stamp of approval of time and millions of users worldwide over the centuries. Some patients are not mentally prepared to use any nasal irrigation, period. Others complain it dries out their nostrils too quickly. Few others complain of ear pain, fullness and dizziness and reduced hearing after using it. Many are annoyed by unexpected and sudden dripping of trapped saline from their nostrils hours after using it. A recent researcher even blamed the saline nasal irrigation for increased frequency of sinus infections in his study subjects! Other doctors do not agree with this finding. Many other studies published in the medical literature do support the use of saline nasal irrigation. Obviously more well-controlled and long-term studies involving larger number of study subjects are needed before any conclusion can be drawn. Until then you be the judge! Talk to your physician if you have any concerns!

About the author:

Natarajan Asokan, M.D., F.A.A.P. is a board certified allergist and immunologist and a board certified pediatrician with over 27 years of experience as a physician and 9 years of experience as a practicing allergist & immunologist. He treats adults and children with various allergy & immunology problems. He can be reached at 1739, Beverly Ave, Suite 118, Kingman, AZ 86409, Tel: 928-681-5800, Fax: 928-681-5801, or www.trinityallergy.com