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EFFICACY OF JALANETI IN PEENAS ROGA WITH SPECIAL REFERENCE TO CHRONIC SINUSITIS: A CASE STUDY.

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Abstract

Shatkarmas, also known as *shatkriyas*, are a set of purifying *Hatha yoga* practices for the body, which prepare the practitioner for the ultimate *yoga* practice in relation to *moksha* (freedom). These practices, described by *Svatmarama* in *Hatha Yoga Pradipika* as *kriyas*, include *Neti*, *Dhauti*, *Nauli*, *Basti*, *Kapalabhati*, and *Trataka*. *Neti* is an essential part of *Shatkarmas*, which are the yogic way of body cleaning techniques. *Jalaneti*, a form of *Neti*, is an effective and well-tolerated treatment for sinus congestion and nasal drip caused by the common cold, allergies, and sinusitis.

Aim: To study the efficacy of *Jalaneti* in *Peenas Roga* w.s.r to Sinusitis. Materials and Method: A patient of the age group 26 years presenting with signs and symptoms of *Peenas Roga* w.s.r to Sinusitis was selected. He was treated with *Jalaneti* for 15 days early morning empty stomach. Two follow ups were taken on the 7th day and 15th day of treatment. Results: *Jalaneti* was found to be effective in the sign and symptoms of Sinusitis. Conclusion: *Jalaneti* is an effective, safe, and potent treatment of *Peenas Roga* w.s.r. to Sinusitis.

Keywords: Ayurveda, Peenas Roga, Sinusitis, Shatakriya, Neti, Jalaneti.

Introduction:

Dhautirbastistathā netistrātakam naulikam tathā Kapālabhātiśchaitāni shatkarmāni prachakshate || Hatha Yoga Pradeepika 2/23 (1)

Shatkarma is a set of six cleansing techniques that include *Dhauti, Basti, Neti, Trataka, Nauli,* and *Kapalabhati.Gheranda*, a prominent author of *Hath Yoga*, emphasized the practice of *shatkarma* in the first phase of yoga.(2)

Ghatastha Yoga, also taught by *Gheranda*, is distributed with seven limbs, unlike the *yoga* with eight limbs (3) from the *Yoga Sutra*. (4) According to *Gheranda*, our body and mind are like a ship (a compound called *Ghata*) that carries our soul and our gunas (5) signals like water inside a ship. *Ghatastha Yoga* aims to cleanse the body

or vessel that carries the soul, using six cleansing methods containing *shatkarma*. Therefore, the practice of *shatkarma* is important for everyone who wants to embark on a yoga journey according to *Gheranda Samhita*. The *Gheranda Samhita* is a step-by-step guide (6) about *yoga* taught by the expert *Gheranda*. Unlike other *hatha yoga* texts, the *Gheranda Samhita* mentions *yoga* in seven stages. (7).

- 1. Shatkarma
- 2. Asana
- 3. Mudra
- 4. Pratyahara
- 5. Pranayama
- 6. Dhyana
- 7. Samadhi

Neti is a cleansing technique that is an essential part of *shatkarma*, also known as *shatkriya*, which is a yogic method of body purification. It is a standard practice that can be performed regardless of one's religion and is specifically designed to clean the air passageways inside the head. The practice of *Neti* is described in both the *Hatha Yoga Pradipika* and other resources. (8)(9) It has both physiological and spiritual benefits for the body, mind, and personality. (10)(11)

There are two main types of *Neti: Jala neti*, which involves the use of water, and *sutra neti*, which involves the use of a string. Additionally, the practice of *Neti* is further divided into four types: *Jala* (water), *Sutra* (catheter), *Dugdha* (milk), and *Ghrita* (ghee). The last three types of neti require a *neti* pot, while sutra neti requires a cotton thread immersed in wax or ghee. (12)(13)

Jala neti

In this approach, sterilized and lukewarm isotonic salt water is poured into one nostril so that it flows out through the other nostril. The same is repeated for the other side and the nostril is dried by bending forward and taking quick breaths. Alternatively, one can sniff the water so that it enters the mouth and then spit it out. In a more advanced version, the water is taken through the mouth and snorted out of the nostril. (14).

Chronic sinusitis is a condition in which the sinuses, which are moist air spaces located behind the bones of the upper face (between the eyes and behind the forehead, nose and cheeks), become inflamed for a prolonged period of time. Normally, the sinuses drain through small openings into the inside of the nose. However, anything that obstructs this flow can cause a buildup of mucus and sometimes even pus in the sinuses, leading to increased sinus pressure and facial pain.

The drainage from the sinuses can be obstructed by various factors such as structural abnormalities of the nose, infections or tissue swelling caused by allergies. In adults, chronic sinusitis is often caused by nasal swelling

caused by allergies, especially allergies to inhaled dust, Mold, pollen or the spores of fungi. These allergies trigger the release of histamine and other chemicals that cause the inner lining of the nose to swell and block sinus drainage.

Chronic sinusitis can also be caused by polyps, nasal tumours, and nasal fractures, which can obstruct the sinus drainage. Additionally, people whose sinuses and nasal passages are structurally abnormally narrow, as well as those with asthma, cystic fibrosis, or immune system problems, are more likely to develop chronic sinusitis. (16)

Symptoms of chronic sinusitis

The most common symptom is painful pressure in upper parts of the face, especially in the forehead, behind the nose, between or behind the eyes, or in the cheek. Sometimes, sinus pain can feel like a toothache. Other symptoms include nasal congestion, postnasal drip that is worse at night, and bad-smelling breath that is unrelated to dental problems. Fever and a thick, discoloured nasal discharge are signs of acute sinusitis, a short-term sinus infection usually caused by viruses or bacteria. The same symptoms can be present in chronic sinusitis.

Jal Neti rinses out the dirt and bacteria filled mucous lining as the warm water loosens and dissolves any internal build ups, and takes them outwards. It also can whisk away bacteria, thin mucus, and cut down on postnasal drip. Due to gravity and a venturi-effect, the sinus passages are also drained by the vacuum pressure flow of the water. So, effective in Chronic sinusitis.

Aim:

To study the efficacy of Jalaneti in Peenas roga w.s.r. to Chronic Sinusitis.

Objectives:

- 1. To evaluate the efficacy of *Jala Neti* in reducing symptoms of chronic sinusitis, such as nasal blockage, discharge, and headache.
- 2. To assess the impact of Jala Neti on improving the quality of life of patients with chronic sinusitis.
- 3. To investigate the safety profile of Jala Neti as a complementary therapy for chronic sinusitis.

Material and methods:

Case Report

Name of Patient: XYZ Age: 26 Years Gender: Female Occupation: Housewife

Presenting complaints:

Running Nose for 2 years

Sneezing frequently for 1 year

Nasal blockage in morning and evening for 1 year

Dryness of Nose for 4-5 months

Mild headache for 4-5 months

Loss of Smell for 4-5 months

History of Present illness:

Patient was absolutely normal before 2 years. Then gradually she developed Sneezing, nasal blockage for 1 year and Dryness of nose, mild headache, and loss of smell for 4-5 months.

Personal History: Appetite- Poor Bowel- Normal Sleep- disturbed due to nasal blockage Built- Normal

History of Past illness:

Medical History status: she was under Antihistamines and Steroids for more than 1 year and got symptomatic relief. Surgical history Not significant Family history: father- K/C/O Hypertension

Marital status: Married

Examination of patient:

General Examination:

RS- Air entry bilaterally clear, no obvious deformity CVS- S1 S2 is Normal, No murmur CNS- Well oriented and Conscious Per Abdomen- Soft, Non-tender Digestive system- decreased appetite.

Local Examination:

Nasal cavity- Normal No any deformity was found

Investigations:

Chest- X- Ray- Normal CBC- Hb-11.2

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WBC- 9800 per cu. Mm

Materials required for Jalaneti:

- 1. Neti Pot
- 2. Water
- 3. Salt

Jala Neti pot:



Assessment criteria:

1. Running nose

Grade	Description
0	No Running Nose (Absent)
1	Mild, occasional running nose without significant impact on daily activities.
2	Moderate, persistent running nose that requires frequent tissue use and may cause discomfort.
3	Severe, constant running nose leading to significant inconvenience and interference with daily life.
4	Very severe, profuse running nose with major impact on quality of life, possibly requiring medical intervention.

2. Sneezing

Grade	Description			
0	No sneezing (Absent)			
1	Mild, occasional sneezing without significant impact on daily activities.			
2	Moderate, frequent sneezing that may cause some discomfort but does not interfere significantly with daily life.			
3	Severe, frequent sneezing leading to inconvenience and interference with daily activities.			
4	Very severe, uncontrollable sneezing with major impact on quality of life, possibly requiring medical intervention.			

3. Nasal blockage in morning and evening:

Grade	Description				
0	No Nasal blockage (Absent)				
1	fild, occasional blockage without significant impact on daily activities.				
2	Moderate, frequent blockage that may cause some discomfort but does not interfere significantly with daily life.				
3	Severe, frequent blockage leading to inconvenience and interference with daily activities.				
4	Very severe, persistent blockage with major impact on quality of life, possibly requiring medical intervention.				

4. Dryness of Nose:

4.	Dryness of Nose:			
Grade	Description			
0	No dryness of Nose (Absent)			
1	Very mild, occasional dryness without significant discomfort.			
2	Mild, noticeable dryness that may cause slight discomfort.			
3	Moderate, persistent dryness causing discomfort and affecting daily activities.			
4	Severe, constant dryness leading to significant discomfort and interference with daily life.			

5. Headache:

Grade	Description				
0	No Headache (Absent)				
1	Very mild, occasional headache without significant impact on daily activities.				
2	Mild, persistent headache that may cause some discomfort but does not interfere significantly with daily life.				
3	Moderate, frequent headache leading to inconvenience and interference with daily activities.				
4	Severe, persistent headache with major impact on quality of life, possibly requiring medical intervention.				

6. Loss of Smell:

Grade	Description	
0	Normal ability to smell	
1	Very mild, occasional loss of smell without significant impact on daily activities.	

Grade	Description			
0	Normal ability to smell			
2	Mild, partial loss of smell that may cause some inconvenience but does not significantly affect daily life.			
3	Moderate, significant loss of smell leading to inconvenience and interference with daily activities.			
4	Severe, complete loss of smell with major impact on quality of life, possibly requiring medical intervention.			

Treatment:

Jalaneti early in the morning, empty stomach for 15 days

Follow ups: 7th day and 15th day.

Instructions given to the patients for Jalaneti:

1. Take five deep breaths and relax as you prepare yourself for *Jalaneti*.

2. Put lukewarm water into the *neti* pot and add a little salt in it. Tilt the neck and touch the tip of the spout to one of the nostrils. Open the mouth and continue breathing through it.

3. Gradually pour water into the nostril. Since the breathing is continued through the mouth, the water straightway goes through the food pipe into the throat to the stomach. Just as we drink water through the mouth, in the same way it can be drunk through the nose. When some water is drunk through one nostril, perform the process with the other one.

4. To help flow water out of the other nostril, tilt the neck further. It is essential to find the pose of the neck here. When the pose is found, the rest of the process is easier. If you have a 1/2 litre pot, then you can fill the vessel again for the second nostril.

5. The stream of water from both the nostrils will not be the same depending on the blockade or nervous spasms. Do the whole exercise gently and in a relaxed posture. One can wipe the nostrils with a clean towel in between while changing the nostrils.

6. Having finished with the water part, just keep both arms at the back and start gently blowing the nose from each nostril (15-20 times) to remove every drop of water. Now look up for 15 seconds and while looking up again blow 10-15 times to blow off any residual water left.

Observations and Results

Follow up observation and result in patient:

Sr. No	Criteria	0 th Day	7 th day	15 th day
1	Running Nose	2	1	0
2	Sneezing	3	2	1
3	Nasal blockage in morning and evening	4	3	1

4	Dryness of Nose	3	1	0
5	Headache	3	1	0
6	Loss of Smell	3	1	0

Discussion:

Most of the symptoms, such as a running nose, dryness of nose, headaches, and loss of smell, were completely cured. Sneezing and nasal blockage were reduced to grade 1. We observed significant results of Jala Neti in treating the symptoms of *Peenas roga* (chronic sinusitis).

Probable Mechanism of Action

Jalaneti, also known as saline nasal irrigation or nasal douching, is a traditional practice in *Ayurveda* and other systems of medicine for cleansing the nasal passages. It is often used as a supportive therapy for various nasal conditions, including chronic sinusitis. The mode of action of *Jalaneti* in chronic sinusitis can be understood as follows:

- 1. **Mechanical Cleansing**: The saline solution flushes out mucus, allergens, and other irritants from the nasal passages and sinuses, helping to clear congestion and reduce inflammation.
- 2. **Moisturizing**: Chronic sinusitis often causes dryness in the nasal passages, which can lead to discomfort and further irritation. *Jalaneti* helps to moisturize the nasal passages, providing relief from dryness.
- 3. **Reducing Inflammation**: By flushing out irritants and allergens, *Jalaneti* can help reduce inflammation in the nasal passages and sinuses, which is a common feature of chronic sinusitis.
- 4. **Improving Nasal Function**: Regular use of *Jalaneti* can help improve the function of the nasal cilia, the tiny hairs that line the nasal passages and help to move mucus out of the sinuses. This can help prevent mucus buildup and reduce the risk of infections.
- 5. Antimicrobial Effects: Some studies suggest that saline nasal irrigation may have antimicrobial effects, helping to reduce the growth of bacteria and fungi in the nasal passages and sinuses.

Conclusion: For the case of chronic sinusitis, *Jalaneti* was found to be very effective and useful. Out of the six symptoms, we achieved a 100% success rate in reducing four of them, which were running nose, dryness of nose, headaches, and loss of smell. Overall, we observed a 67% relief in reducing symptoms. *Jalaneti* is a safe and easy procedure that can be done at home by oneself.

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