



Research Paper

## Management of Deviated Nasal Septum by Holistic approach of Siddha Therapy- A case study

Dr Bhuvanagiri Sathya Sindhuja<sup>1</sup>, Injarapu Sankar<sup>2</sup>, Dr Ram Mohan Reddy<sup>3</sup>, Dr Shweta Tiwari<sup>4\*</sup>

<sup>1</sup> Patron, Chakrasiddh; <sup>2</sup> Chief Healer; <sup>3,4</sup> Consultant Dr  
<sup>1,2,3,4</sup>Dept of Siddha Medicine, Chakrasiddh health centre, Hyderabad, India  
Corresponding Author: Shweta Tiwari

### ABSTRACT

DNS is a very common condition but in moderate or severe cases, it causes nasal obstruction, epistaxis, sinusitis, migraine and obstructive sleep apnea. Due to relapse of symptoms, patients take up alternative methods in DNS cases. The aim of our study was to determine to highlight if traditional Siddha therapy can prove to be another treatment modality in DNS cases by reducing the present symptoms and dependency of medicines with correction of nasal structure without intervention of conventional surgery. Mookadaipu which is also known as Peenisam or neerkovai in Siddha literature bears a resemblance to clinical symptoms of Nasal blockage of Modern medicine by deviated nasal structure. **Siddha vaidyam**; an ancient and old therapy, has been adopted to treat many patients to treat symptoms caused by DNS and structural correction by just using hand pressure technique. In this article, we present a case report of 35 years old male with deviated septum who underwent 4 siddha sessions with a gap of 3 days in each session for 21 days. The patient's DNS clinically was classified as Type III when he came for treatment which after the sessions was designated as Type I. Snot-22 questionnaire score was reduced from 41 (Pre-treatment) to 9 post treatment. Clinically pre and post x-rays showed the nasal septum correction. The bio-markers i.e the lab investigations taken pre and post therapy also showed improvement. The study showed that functional outcome was achieved in patient without intervention of any medications. Siddha therapy with just hand pressures can prove to get good results both symptomatically and correction in nasal deviation .

**Keywords:** Deviated nasal septum, Chronic sinusitis, Mookadaipu, Siddha Varmam Therapy, Mladina's classification

**Abbreviations:** DNS (Deviated nasal septum), SNOT-22 (Sino Nasal Outcome Test-22) VAS (Visual Analogue scale)

Received 03 Feb., 2024; Revised 11 Feb., 2024; Accepted 13 Feb., 2024 © The author(s) 2024.

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### I. Introduction

Nasal septum is a bony cartilaginous wall which is located at the centre of the nose and separating the two chambers of nostril i.e right and left. The primary function of nasal septum is to provide a structural support to the nose. DNS is a condition in which there is displaced nasal septum towards one side or if septum has shifted away from the midline [1]. Almost 75-85% of population in world have a mild form of deformity in nose anatomy and in most cases, it is asymptomatic [2]. But those who have moderate and severe deviated septum, they can show symptoms in form of nasal obstruction like obstructed breathing, nasal discharge, facial pain and altered smell. This can lead to other serious conditions like sleep apnea, and tinnitus. It may also cause permanent changes in the nasal and sinus mucosa due to obstructed ventilation[3].

In 2011, a study found that 85-88% of the cases of deviated nasal septum occurred in males and only 10-12% in females. According to literature, most of these incidents are found in patients aged between 20-40 years, while in another study, they found a low correlation between the age and the type of septum deviation [4]. Various reasons have been attributed to occurrence of deviated nasal septum with 72% of these caused by trauma and 24% caused by trauma at birth [5]. The higher incidence rate in men is largely due to trauma that often occurs in men. The other factors include racial factors and congenital deformities of septum [5].

The septum deviation is diagnosed basically on patient's clinical symptoms & physical examination or during other investigations such as, PNS X-ray & CT-Scan. Patient's having DNS have 65% more chances of developing sinusitis. The anatomical structure of the nose can lead to airflow change in nasal area leading to nasal congestion, and inflammation in sinus [6]. The treatment of septum deviation is based on the complaints and complications and can be managed by local inhalers & steroids. In some complicated cases an operative procedure is required to correct the deviation for improving the nasal obstruction as well as for aesthetic purposes [7].

Though, in modern medicine nasal deviation can only be corrected by surgical method but recent studies shows alternative therapies like *Siddha vaidyam*; which is an ancient and old therapy, has proved to be significantly correcting and improving DNS and related symptoms without surgery. It works on aligning body energies (mind, body and spirit) and by use of different hand manipulation techniques like Pressure Therapy (*Varmam*), there is a visible improvement of overall circulation to the affected area [8]. Along with treatment, yoga and breathing exercises are included in the management of this type of disorder. Siddha activates the body's internal healing mechanisms, thus resulting in decreased intensity of symptoms related to DNS and finally correction in septum deviation which boosts the overall appearance and symptomatically lifestyle of the patient [9].

According to some Siddhars, *Mookadaipu* which is also known as Peenisam or neerkovai in Siddha literature bears a resemblance to clinical symptoms of Modern medicine Nasal blockage caused by deviated nasal structure. It is a combination of sinusitis and rhinitis (Rhino sinusitis) than mere deviated septum as symptoms were considered the same [10]. The other symptoms closely resembles the symptoms of *vazhi*, *azhal*, *Iyam* and *neer* which are mentioned in siddha literature. In siddha, *Vazhi* refers to sneezing, irritation in nose, running nose; *Azhal* refers to nasal blockage due to curve, inflammation in nasal mucosa; *Iyam* resembles irritating pain in nose, expulsion of mucous, bleeding from nose due to mass formation on either septum and *Neer* means stuffiness, watery discharge from nose [11].

In this article, we present a case report of 35 years old male with deviated septum who underwent 4 siddha sessions for correction of nasal septum and has a good result without complication.

## II. Case Report

### Participant Information

A 35-year old Bank employee came to Chakrasiddh centre in March-2023 with complaint of nasal congestion since 10 years. Patient also complained of frequent nasal obstructions, colds and headaches, stiffness in left neck region and insomnia. He occasionally has symptoms like sneezing, nosebleeds, breathing issues and often has difficulty in smelling. The headaches were moderate in day with severity increasing till evening and were observed whole day especially in summers. He had multiple episodes of acute sinus infections over the years and were managed by steams and antibiotics. The stiffness in neck on left side is grave so he has to sleep sideways on right side. He feels pain on left lateral flexion on turning his head.

The patient is a pre-diabetic and is on anti-hypertensive drugs from last 2 years. He had an accident 7 years back and had fallen on his face. He had bleeding from nose but was managed properly. He noticed increase in headaches and sleep disorders after that. In recent months, the severity of his symptoms related to nasal obstruction has become aggressive. He failed multiple courses of medical treatment including antibiotics, nasal steroid, oral steroid, and antihistamine. His symptoms are now interfering with his lifestyle and work [12]. The ENT report showed the ear and throat within normal limit, but the PNS x-ray reported both sides of nasal cavity as narrow; the mucosa is slightly inflamed, inferior turbinate hypertrophy and a deviated septum to the right. The observed DNS clinically was classified as Type III- Posterior vertical deviation at level of OM and middle turbinate. This type of septal deviation in the posterior part of the nose has incidence rate of approx 16.5% [13].

In Siddha, deviated septum is treated through a technique by Nasiyam to stimulate the Varmam points to activate body's internal healing mechanism. The therapy is continued for 3-4 sessions in a gap of 3 days. Nasiyam involves facial palpitation, Vedhu (herbal steam) and specific Eucalyptus oil application into the nostrils [11]. Nasal administration instigates *Ajna Chakra*, a *Varmam point* (Nerve plexus at the base of the nose between the eye brows, which is connected with the Master gland i.e. Pituitary gland of the body) which controls all most all hormonal secretions in the body ultimately controls whole body physiology. It kills the receptors, which shows hypersensitivity to dust and other allergens. Cleans the blocked sinuses, kills microorganism responsible for sinusitis and reduces the inflammation in the sinuses [10]. This effective therapy results in decreased intensity of symptoms related to DNS and finally correction in septum deviation by hand manipulation, boosting the overall appearance and symptomatically lifestyle of the patient. Surgeries can be avoided for Sinusitis, DNS with this simple manipulation.

### **Assessment Criteria**

For the assessment of nasal obstruction symptoms, the SNOT-22 questionnaire was subjected to patient pre & post treatment and at 5-6 months of followup. SNOT- 22 total score 8-20 represents mild, > 20 to 50 represents moderate and > 50 represents severe condition [13]. VAS was taken every week to see the effect in severity of neck symptoms as on scale 0-10 where 0 refers to mild symptoms and 10 being severe effect before starting and after completing the treatment[7]. The patient's DNS clinically was classified as Type III with left side deviation, maxillary sinusitis by ENT doctor determined by her CT report and x-ray. Bio-markers like IgE and ESR levels were increased.

### **Treatment Protocol**

The treatment was started on 12th March, 2023; it was planned for 15 days for Cervical Stiffness along with 3 sessions of Nasal septum twice a week. The rest 2 sessions after gap of 1 month. The patient had complaints of constipation so special diet was prepared and daily physio exercise for 1/2 hr were initiated. It's mentioned in Siddha literatures, that constipation is closely related to headaches [8].

In initial week, patient could see difference in his neck stiffness. He could notice that he was able to sleep on left side while earlier he could not sleep sideways even for 5 mins. He could identify stiffness reduction as now he was able to bend move in all directions. Pain in neck reduced from 8 to 4 on VAS in just first week. The Founder, and a patriarchy of this aged old therapy, did the septum correction session by hand pressure therapy (*Varmam*). She initiated by manipulating with hands inside the nasal cavity and opening the pores of sinus. For nasal blockages, she used eucalyptus drops into nose to clear irritation [14].

An expert in siddha and energy medicine, the founder felt some energy blockages in the patient so, a gut session was performed on stomach region by initiating the varmam points with hand manipulation techniques and aligning body energies (mind, body and spirit). After the session, he was monitored for feedbacks related to his sleep and headaches. The patient could feel a lot of difference in nasal blockage and there was no heaviness in head. He was able to sleep without medications which was not possible earlier. In subsequent week, he noticed there was no nose bleeds, breathing is improved and tiredness is reduced. Headaches were on/off but with very less severity and only when he has stress. It was noticed by his wife that his snoring was not there and sneezing had reduced drastically.

Along with treatment, strict diet, water intake, yoga and breathing exercises were included in the management of this type of disorder. Total in all 3 sinus sessions were performed in initial phase and 12 days for cervical treatment. Depending upon the feedback, X-rays were taken out for pre and post appearance of DNS. The patient was advised to take a break for 4 months and monitor the symptoms along with instructions for cervical exercises, diet management and steam inhalation. He was addressed again in Sept-23 and followup SNOT-22 questionnaire was filled again.

### **III. Results**

The patient's DNS clinically was classified as Type III when she came for treatment which after the sessions was designated as Type I (Fig 1). The SNOT-22 questionnaire which was observed as 41 (moderate) at time of starting the therapy was at 8 (mild) post treatment and 3 after follow-up at 4 months (Table-1). VAS in neck which were at scale 9 at time of start of treatment was lowered to 3 on completing the treatment (Table-2). The range of movements (ROM) of the neck was also improved on measuring by goniometer recorded by physiotherapist at centre.

**Figure-1: Pre and post therapy X-rays depicting the correction of Nasal septum**



**Table1-Assessment of Sino nasal Outcome Test-22 pre & post treatment**

Symptoms	Pre-treatment(0-5)	Post-treatment(0-5)	Follow-up after 5 months
Nasal blockage	5	2	1
Need to blow nose	3	1	0
Headache	2	0	0
Sneezing	3	1	0
Running nose	2	1	1
Decreased sense of Smell	3	0	0
Trouble sleeping	5	1	0
Wake up at night	2	0	0
Wake up tired	2	0	0
Cough	2	2	1
Post-nasal discharge	2	0	0
Thick nasal discharge	2	0	0
Dizziness	1	0	0
Ear fullness	0	0	0
Ear pain	0	0	0
Facial pain	1	0	0
Fatigue	1	0	0
Reduced productivity	2	0	0
Concentration loss	0	0	0
Frustrated/irritable	1	0	0
Sad	0	0	0
Embarrassed	2	0	0
<b>TOTAL SCORE</b>	<b>41</b>	<b>8</b>	<b>3</b>

Scoring: 0-8- Normal  
 8-20 = mild problem  
 >20-50 = moderate  
 >50= severe

**Table 2: Biomarkers in Before Treatment and After Treatment**

Clinical Biomarkers	Pre-treatment	Post-treatment
Hemoglobin	14.6 g/dl	14.2 g/dl
Packed cell volume	43.7%	42.1%
RBC Count	4.5 Milli/cu.mm	4.7 Milli/cu.mm
Mean corpuscular volume	90.3 Fl	89.9Fl
Mean corpuscular hemoglobin	30.3 pg	30pg
Mean corpuscular hemoglobin concentration	35.2 g/Dl	33.3 g/Dl
Platelet count	2.6 lacks	2.45 lacks
Total WBC count	7200 cells/cu.mm	8100 cells/cu.mm
ESR	45 mm/hr	15 mm/hr
Neutrophils	51%	67%
Lymphocytes	40%	28%
Eosinophils	3%	2%
Monocytes	4%	3%
Basophils	0%	0%
Serum Ig E	210 IU/mL	72 IU/mL
Blood Sugar ®	117 mg/dl	105 mg/dl
Urea	29.8 mg/dl	26.3 mg/dl
Creatinine	1.1 mg/dl	0.9 mg/dl
Uric acid	5.2 mg/dl	4.8 mg/dl
T. Bilirubin	0.7 mg/dl	0.6 mg/dl
D. bilirubin	0.1 mg/dl	0.1 mg/dl
In. Bilirubin	0.6 mg/dl	0.5 mg/dl
SGOT	17.1 IU/L	16.4 IU/L

#### IV. Discussion

WHO accepted the traditional Siddha system as a holistic health care system and its terminologies where *Mookadaipu* which is also known as Peenisam or neerkovai in Siddha literature bears a resemblance to clinical symptoms of Nasal blockage caused by deviated nasal structure [10]. It is believed in 45% of the patients that have sinusitis, it is caused due to nasal septum deviation so treating the symptoms of sinus can be one treatment modality for DNS [15]. The prevalence of DNS is more in neo-natal trauma cases but can happen

in some accidental cases too [1]. The present study confers the outcome of other studies in which most frequent noted symptoms of DNS is nasal discharge (96.66% ), followed by nasal congestion (93.33%), sleep disturbance (90%), head ache (90%) [16]

In Siddha literature, both internal and external medicines are prescribed for sinusitis and manipulation techniques to improve the nasal septum [8]. Intranasal corticosteroids, Oral corticosteroids, Antibiotics, Antihistamines and Topical decongestants are recommended for treatment of symptoms of DNS but in severe cases, Septoplasty is only options. However, chances of relapse of symptoms in both cases are high [3].

In Siddha, deviated septum is treated through a technique by Nasyam to stimulate the Varmam points to activate body's internal healing mechanism. Nasyam includes facial massage, fumigation and specific Eucalyptus oil application into the nostrils [11]. Studies show eucalyptus oil helps to curb inflammatory issues that can lead to problems like sinusitis in the longer run. It kills the germs that are responsible for causing allergy, irritation, and nasal blockage [14].

Varmam treatment involves manipulating specific energy spots to restore vital energy and facilitate healing processes [8]. These energy spots, known as Thodu Varmam, correspond to junctions of muscles, nerves, veins, arteries, and capillaries, believed to regulate bodily functions [8]. Thokkanam with gentle pressure strokes incorporated in neck and upper back, another integral component, is used to alleviate pain and promote healing [10].

The potential of Siddha therapy lies in its holistic approach, addressing the physical, mental, and spiritual aspects of an individual. While the conventional management of DNS primarily involves surgical or pharmacological interventions [7], Siddha therapy offers a non-invasive alternative that aligns with the patient-centered approach, emphasizing overall well-being by improving his lifestyle [16].

The findings from this case report serve as a catalyst for exploring the efficacy of Siddha therapy in managing DNS. By addressing the underlying energy imbalances and stimulating healing through non-invasive interventions, Siddha therapy presents a promising adjunct or alternative to conventional treatments [8].

SNOT-22 scale was used to assess symptom severity, social and emotional impact, productivity and sleep consequences of the patient. SNOT-22 total score 8-20 represents mild, more than 20 to 50 represents moderate and more than 50 represents severe condition [13]. Snot-22 total score decreased from 41 (moderate) before treatment to 08 (mild) after completion of treatment. No recurrence of any clinical features like sneezing, nasal congestion and snoring was observed during the five months of follow-up of siddha intervention.

## V. Conclusion

In modern medicine, DNS can be managed by continuous use of steroids and finally a surgery but this case study proved that *Siddha Vaidya*, an ancient science by just using hand manipulation techniques can correct the deviated septum with simple methodology. By aligning body energies (mind, body and spirit), which empowers and activates the body's internal healing mechanisms thus, resulting in cure and an improved lifestyle. *Siddha* therapy along with diet and physiotherapy rehabilitation played a vital role in the correction of DNS and eventually reducing the symptoms of sinusitis, functional independence, and quality of life in patients. Additionally, further study should be done with large sample to reveal efficacy of siddha treatment for DNS.

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