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CASE REPORT

# Management of *Swarabheda* (Hoariness of Voice) Through *Ayurveda*: A Case Report

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## Abstract

*Swarabheda*, or hoarseness of voice, is one condition that afflicts one-third of the population. The vocal quality was described as weak, breathy, or strained. This condition often results from inflammation or infection of the vocal cords, imposing several social, emotional, and occupational limitations. *Ayurvedic* literature refers to *Swarabheda* as an independent pathology related to *doshas* in stages of alterations that affect the *Shabda Vaha Srotas* (voice channels), with conventional intervention focused on voice rehabilitation. To evaluate the efficacy of *Ayurvedic* treatment modality in the form of *Shodhana Chikitsa* (purification therapy) and *Shamana Chikitsa* (pacification therapy) in the treatment of *Swarabheda* (hoarseness of voice). A single case study was undertaken of a 30-year-old female patient diagnosed with *Vataja Swarabheda.* The treatment plan included *Bala Ghrita, Gandusha,* and a combination of herbal drugs like *Khadiradi Vati*, *Lavangadi Vati*, *Kalyana Avaleha* and *Marsha Nasya.* Treatment was for one month, and the patient was monitored at 15-day intervals with the G.R.B.A.S. Scale and vocal cord imaging. Good voice quality was resumed, hoarseness was alleviated, and other symptoms of nasopharyngeal carcinoma, like discomfort in the throat, dry cough, and fever, subsided during treatment. Scores on the G.R.B.A.S. Scale were enhanced, and endoscopic studies established a reduction in inflammation and cystic size on the affected vocal cords. This case report indicates that a confluence of *Ayurvedic* treatment is compelling for treating *Swarabheda* and a much less invasive nonsurgical solution with fewer side effects than conventional surgical treatments. Further studies are recommended to confirm these findings and validate *Ayurvedic* interventions as an effective treatment for voice alterations.

**Major Findings:** The *Ayurvedic* treatment combined with *Shodhana* and *Shamana* therapies relieved hoarseness in the patient diagnosed with *Vataja Swarabheda* and significantly improved voice quality. The inflammation was also shown to be less by endoscopy.

**Keywords:** GRABS Scale, *Gandush, Nasya,* Hoarness of Voice, *Swrabheda*, *Shaman Chikitsa, Shodhana*

## 1. Introduction

Hoarseness, or dysphonia, is the condition in which the voice is feeble in terms of volume or pitch, raspy, breathy, or strained. Dysphonia is one of the most common symptoms in E.N.T. practice. To acquire a normal voice, the vocal cords should be approximated correctly, appropriately sized and stiff, and vibrate to the airflow. Any disruption in these processes can result in hoarseness, as there are myriads of causes ranging from minor diseases to malignancy. The common causes include inflammatory conditions, tuberculosis, benign tumours like vocal nodules and polyps, trauma, vocal cord paralysis, functional dysphonia, and malignancy. Hoarseness affects nearly one-third of the population at some point during life and is more commonly encountered among males and older adults. Dysphonia can easily lead to social isolation and anxiety, loss of work time, decreased income, and some lifestyle changes[1].

Hoarseness may be secondary to systemic or local inflammation due to physical or mental trauma, chemical exposure, blockage from a tumour, or other systemic illnesses. Although benign causes of

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hoarseness outnumber the cancerous, hoarseness lasting more than two weeks must be appropriately worked up[2].

In *Ayurvedic* medicine, hoarseness is referred to as *Swarabheda*, which *Sushruta* classified into six forms, each associated with imbalances in different *dosha; Vata* causes weakness and instability in voice, *Pitta* gives burning sensations in the throat and the palate. *Kapha* causes stuttering and congestion with slowness in voice. *Rakta* causes weakness in voice, rendering it weak and laboured. Excessive coughing irritates the throat, and long-standing problems like chronic coryza characterized by *Vata-Kapha* dominance may cause hoarseness[3].

The treatment approach in modern medicine varies with the nature and severity of the pathology, which is often accompanied by costly interventions that most patients are reluctant to undergo. In such a scenario, the present study has chosen alternative treatments based on *Ayurveda*, such as *Shodhana* (cleansing) and *Shamana* (pacifying) therapies, which are inexpensive and harmless measures for the management of *Swarabheda*[4]. The current study was to evaluate the efficacy of *Ayurvedic* management, especially *Shodhana Chikitsa* (cleansing therapy) and *Shaman Chikitsa* (pacifying therapy), in the management of *Swarabheda* (hoarseness of voice).

## 2. Materials and Methods

### 2.1 Present History

Patient details are presented in Table 1. The patient is a 30-year-old female who presented pretty well. At one year of age, the child complained of hoarseness of voice, inability to speak, and painful swallowing; she also had a chronic dry cough for the past six months, she informs. Summary of chief complaints with additional evening onset fever of the same duration for the past six months. She was put on allopathic treatment three months ago for hoarseness of voice, which she still has, along with difficulty in swallowing and uneasiness in the throat. She also stopped taking medication. As the pain became worse, she visited Shalakyatantra division, Mahatma Gandhi Ayurved Wardha College, Hospital, and Research Center; there, she was counselled after being given *Ayurvedic* treatment that had undergone *Kriyakalpa* procedures. Recordings of vital signs and *Ashtavidha Pariksha* observations made during the assessment can be seen in Table 3 and Table 4, respectively.

### 2.2 Past History

Six months ago, she had a fever and a common cold. She has no history of any medical diseases, like bronchial asthma, diabetes mellitus, hypothyroidism, dengue, or disease of the thyroid. She is not involved with chemicals or surgery, trauma, or any other medical intervention.

### 2.3 Medical History

The patient had undergone symptomatic allopathic medications in the form of Erythrocin 500 mg and Signoflam tablets twice a day for five days to relieve the hoarseness.

### 2.4 Personal History

The patient follows a pure vegetarian diet and takes food twice a day. She is not getting proper sleep due to coughing.

### 2.5 Patient's Profile

The patient is a 37-year-old married female teacher from Swangi Meghe, belonging to middle-class socioeconomic status (Table 1). Her chief complaints are hoarseness, difficulty speaking, and pain on deglutition, all graded 3+ GRABS scale for six months, and she also has a dry cough and evening fever (Table 2). Table 3 shows the vital measurement readings, high blood pressure of

**Table 1.** Patient information

| Parameter | Details |
|---|---|
| Name | X.Y.Z. |
| Age | 37 years |
| Sex | Female |
| Address | Swangi Meghe |
| O.P.D. Number | 2305250057 |
| Occupation | Teacher |
| Marital Status | Married |
| Socioeconomic Status | Middle class |
| Weight | 68 kg |
| Height | 5′4″ |

*Basic patient demographics are collected to provide context for clinical assessment and treatment planning.

**Table 2.** Chief complaints

| Sl. No. | Complaints | Grade | Duration |
|---|---|---|---|
| 1 | Hoarseness of Voice | 3+ (GRABS Scale) | Since 6 months |
| 2 | Trouble speaking | 3+ | Since 6 months |
| 3 | Pain while swallowing | 3+ | Since 6 months |
| 4 | Dry cough | 2+ | Since 6 months |
| 5 | Evening fever | 2+ | Since 3 months |

* GRABS Scale used for grading symptoms; further citations are required for each symptom source[5].

**Table 3.** Vital examination

| Vital Sign | Measurement |
|---|---|
| Blood Pressure | 130/90 mmHg |
| Pulse | 74/min |
| Respiratory Rate | 20/min |

*Vital signs are critical for assessing current health and monitoring patient status during treatment[6].

**Table 4.** *Ashtavidha Pariksha*

| Parameter | Observation |
|---|---|
| *Nadi* (Pulse) | 74/min |
| *Mala* (Stool) | *Samyak* |
| *Mutra* (Urine) | *Samyak* |
| *Jeeva* (Tongue) | *Saam* |
| *Shabda* (Speech) | *Aspashta and Sakashta* |
| *Sparsha* (Skin) | *Anushnasheeta* |
| *Druk* (Eyes) | *Prakriti* |
| *Akruti* (Posture) | *Prakriti* |

*The *Ashtavidha Pariksha* (eight-fold Examination) is an essential diagnostic approach in *Ayurveda* to evaluate overall health and balance[6].

130/90 mmHg, pulse of 74/min, and respiratory rate of 20/min. *Ashtavidha Pariksha's* findings in Table 4, show pulse rate of 74/min, normal stool, and urinal pattern, coated tongue, unclear and slurred speech, cool skin, and normal eye health and posture.

## 2.6 Local Examination

The locally-formed Examination revealed that the patient's bilateral tympanic membranes were intact. The nasal Examination was unremarkable, with no abnormalities. The throat examination was abnormal, indicated by laryngitis and a vocal cord cyst in Figure 1.



**Figure 1.** Endoscopic image of the vocal cord.
*This picture of vocal cords taken from an endoscope shows swelling and erythema. The features are probably indicative of some inflammation or irritation. Such a case can be associated with laryngitis, vocal stress, or initial pathologies of the vocal cords. Laryngoscopy view will aid in determining the health status of the vocal cords and diagnosis will help in relevant treatment of it[7].

## 2.7 *Nidana Panchak* (Five-Fold Examination)[8,9]

### 2.7.1 Hetu (Causative Factors)

The patient's diet included poha, cookies, roti, dal, rice, pickles, and spicy food items, along with stale bread. Continuously sipping ginger tea without regular eating times caused the imbalance.

### 2.7.2 Purvarupa (Prodromal Symptoms)

Some early signs started in the patient that involved irritation in the throat, irritability, and troubles while speaking and swallowing.

### 2.7.2 Rupa (Manifested Symptoms)

The symptoms that came were hoarseness, hurt in the throat, burning sensation, and slight pain while speaking and swallowing.

### 2.7.3 Upashaya (Relieving Factor)

Some relief was induced using cold or room temperature water.

### 2.7.4 Samprapti (Pathophysiology)

The doshas were disturbed due to the etiological causes. In this case, the *Swaravaha Srotas* (voice channel) got damaged, making the person suffer burning sensations, irritation, and hoarseness. The doshas involved are *Vata* and *Kapha*, with *Ama* accumulation causing *Vayu* to increase, thus blocking the normal voice production

function of *Udana Vayu*, which in turn caused *Swarabheda* or hoarseness.

## 2.8 Factors Contributing to Disease Pathophysiology

Exposure to toxins, too much reading aloud, and trauma also contribute to *Vata*-induced hoarseness. These factors deranged all three *doshas* but predominantly increased Vata and led to localized *dosha* imbalance involving the vocal cords, impeding voice production and producing hoarseness. The obstruction causes the *Prana* and *Udana Vayu* related to it and has symptoms such as hoarseness and difficulty in vocal expression[10].

## 2.9 Examinations

A CBC and thyroid profile were recommended. Endoscopy of the vocal cords revealed a diagnosis of vocal cord cyst, as seen in Figure 1.

## 2.10 Outcome

The diagnosis of *Vataja Swarabheda* was confirmed.

## 2.11 Observation and Result

Marked alleviation of hoarseness of voice with mild diminution of pain was observed after seven days of *Shodhana Chikitsa* (Table 5). After 20 days of *Shamana Chikitsa*, the swelling of nodules on the vocal cord had reduced, and all the symptoms of coughing and hoarseness were resolved. He was quite easy to speak, and his speech fatigability had improved. Continued *Shamana Chikitsa* over one month resulted in complete resolution of symptoms, with no nodules found on follow-up telescopic inspection (Table 6)[11,12]. Symptoms such as fever, pain during swallowing, and dry cough were completely relieved. Clinical symptoms were graded at 20$^{th}$ days and one month using the GRABS Scale as shown in Table 7.

**Table 5.** *Shodhana Chikitsa* protocol for *Swarabheda* treatment

| Sr. No. | Type of *Chikitsa* | Dose | Duration | References |
|---|---|---|---|---|
| 1 | *Marsha Nasya* | *Bala Ghrita Nasya* (8 drops in each nostril) | 7 Days | [13] |
| 2 | *Gandusha* | *Yashtimadhu, Triphala, Saindhava, Haridra* | 7 Days | [14] |
| 3 | *Sthanik Abhyanga(Urdhwajatrugata Bhaga* and lumbar region*)* | *Dashamoola Taila* | 15 Days | [15] |

**Table 6.** *Shamana Chikitsa* protocol for *Swarabheda* Treatment[16,17]

| Sl. No. | Drug | Dose | Time | Anupama | Duration |
|---|---|---|---|---|---|
| 1 | *Khadiradi Vati* | 10 g B.D. | After food | Lukewarm water | 1 month |
| 2 | *Lavangadi Vati* | Two tablets | Before food | Lukewarm water | 1 month |
| 3 | *Kalyana Avaleha* | 2 tsp daily | After food | With lukewarm water | 1 month |

**Table 7.** Assessment of subjective criteria

| Sl. No. | Subjective Criteria | Before Treatment | After 15 Days | After Treatment 1 Month | References |
|---|---|---|---|---|---|
| 1 | Hoarseness of Voice | 3+ G.R.B.A.S. Scale | 2+ | 1+ | [18, 19] |
| 4 | Dry Cough | 2+ | 1+ | 0 | [18] |
| 3 | Trouble Speaking | 3+ | 1+ | 0 | [19] |
| 4 | Pain while Deglutition | 3+ | 1+ | 0 | [20] |
| 5 | Fever in the Evening | 2+ | 1+ | 0 | [21] |

*Schwartz *et al.,* guidelines advise the patient to undergo conservative management using voice therapy and vocal rest for hoarseness as it considerably impacts the vocal quality and life quality. They also suggested hydration and rest to help subside the hoarseness and coughing[18]. Roy *et al.,* underline that nonsurgical treatments successfully treat speaking problems observed in voice disorders and help patients without surgical interventions. Dicpinigaitis recommends anti-inflammatory support for throat aching when swallowing, which is the symptom most patients with voice disorders undergo[20]. Rosenthal LH *et al.*, emphasize *Ayurveda doshas* balancing techniques that manage symptoms such as evening fever in patients[21].

The studies shown in Table 7 prove the need for *Ayurvedic* treatments for symptomatic relief in *Swarabheda.*

### 2.11.1 Clinical Symptoms Assessment

The patient's voice was assessed on the 20th day and one month later with the use of the GRABS Scale, as indicated in Table 8. Results from the tests through this scale showed step-by-step quality improvement in her voice, a remarkable reduction in hoarseness, and overall enhancement in the clarity and strength of the voice-over treatment time[22].

The GRBAS scale measures voice quality in terms of a rating scale that has four grades:

- 0: Normal
- 1: Slight
- 2: Moderate
- 3: Severe

This rating scale is also used in all five aspects of G.R.B.A.S. components: Grade, Roughness, Breathiness, Asthenia, and Strain. The clinicians assess the severity of all these vocal impairment aspects to determine an overall examination[22,23].

### 2.11.2 Gandusha

*Ayurvedic* Treatment with Herbal Formulations: *Gandusha* is a kind of *Ayurvedic* treatment where medicinal liquids are kept in the mouth for an exact duration, continued until manifestations of nasal discharge and lacrimation appear, at which stage the patient is asked to spit out the liquid. The most common materials in *Gandusha* are *Yashtimadhu*, *Triphala Kwatha, Haridra Kwatha*, and *Saindhava Lavana*. Regular practice of *Gandusha* is said to make the voice stronger (*Swarabalam*), the *rasasvaada* better (taste sensation), the mandibular part strong (*Hanubalam*), and the teeth robust and general health of the face. Also, it prevents *Doshaja* (due to *doshas*) and *Aaganthuja* Oral diseases[24].

The medicated liquids in *Gandusha* activate chemoreceptors and nuclei in the brainstem, thus activating the parasympathetic nervous system, which sends impulses through the motor fibres of the facial and glossopharyngeal nerves, thereby inducing an increase in watery (serous) saliva secretion. Ingredients of *Gandusha* have been reported to have immunomodulatory and antipyretic properties. *Haridra* is rich in anti-inflammatory properties and acts as an expectorant and anti-allergic, which is efficacious for inflammatory diseases, cough, asthma, and anorexia[25].

## 3. Discussion

He was put on strict voice rest for 7 days to allow the vocal cords to recover and return to their rested state. In *Ayurveda, Acharya Sushruta* has mentioned general treatment (*Samanya Chikitsa*) for *Swarabheda* or hoarseness: *Nasya- Gandusha*, etc. *Vataja-Swarabheda's* remedies include *Katu Dravya* mixed with honey as *Lehya* (lickable medicine) to provide relief[26].

### 3.1 *Lavangadi Vati*

Clove-based herbal tablet useful in treating breathlessness, cough, and irritation caused by the throat because it is an analgesic[27].

### 3.2 *Khadiradi Vati*

An *Ayurvedic* medicine using *Khadira* and *Javitri* as critical drugs to treat a range of oral and throat disorders. An antiseptic, astringent, and anti-inflammatory agent with expectorant properties to manage cough[28].

**Table 8.** G.R.B.A.S. scale components with author citations

| Component | Description | References |
|---|---|---|
| G - Grade | Degree of overall hoarseness or dysphonia severity. | 22 |
| R - Roughness | Impression of irregular vocal fold vibration affecting voice clarity. | 22 |
| B - Breathiness | The extent to which air leakage can be heard due to incomplete vocal fold closure. | 22 |
| A - Asthenia | Degree of vocal weakness or reduced vocal energy. | 23 |
| S - Strain | The extent of phonatory effort or tension perceived in the voice. | 23 |

### 3.3 *Kalyana Avaleha*

It is believed to balance *Vata* and *Kapha doshas*. *Kalyana avaleha* is generally chosen especially for voice-related problems. The *Swarya* property of *Yashtimadhu* enriches the voice quality and tone, reduces the annoyance of the throat, and promotes the expulsion of excess mucus[29].

#### 3.3.1 *Shodhana Chikitsa (Purificatory Therapy)*

*Nadisweda*-steam therapy after *Sthanika Abhyanga*-localised massage is used to relax the channels that carry nutrients to muscles and to evacuate waste. *Abhyanga* and Sudation therapies help in the circulation of *Twak* (skin), *Rakatavahini* (blood vessels), and *Snayu* (ligaments), hence relieving stiffness and clearing up micro-channels. *Nasya* therapy also helps remove *Doshas* from the head and neck region[30].

#### 3.3.2 *Bala Ghrita Nasya*

Since *Swarabheda* is associated with *Urdhwajatrugata Vikara* (diseases above the clavicle) and impinges on the vocal cords, *Nasya* with *Bala Ghrita* was also administered. *Bala Ghrita* possesses *Brumhana* (nutritive), *Shoshahara* (anti-inflammatory), and *Vatanulomana* (regulated *Vata dosha*) actions, thus suitable for nasal application to purify head regions. The treatment caused much relief, wherein hoarseness and cough were remarkably reduced, and voice quality improved[31].

In conclusion, this holistic approach of *Ayurveda* that incorporates *Shodhana* and *Shamana Chikitsa* with dietetic changes and herbal medicines has indeed shown significant improvement in the patient's vocal function, proving the case for *Ayurveda* as a sound therapeutic science in the treatment of voice disorders like *Swarabheda*[32].

## 4. Conclusion

On the last day of the 20$^{th}$ treatment day, the patient improved so significantly that it passed the grade for Swarabheda symptoms, proving that an integrative approach using therapies of *Panchakarma* such as *Shamana Chikitsa, Nasya*, and *Gandusha* can treat *Swarabheda* without developing any side effect. This case suggests that such conditions may not require advanced or surgical interventions. This outcome is, however, based on a single case. Studies on larger sample sizes are required to establish proper, exemplary standards for effectively treating *Swarabheda* in clinical practice.

## 5. Author Contribution

Megha Khurendra Tidke conceptualized the study and drafted the manuscript. Pramod Borghare supervised the treatment protocol and methodology. Piyush Pardhekar conducted clinical observations and data collection. Raza Sheikh critically revised the manuscript and ensured its integrity. All authors have read and agreed to the published version of the manuscript.

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