

MANAGEMENT OF VOCAL CORD PARALYSIS W.S.R. TO SWARASADA WITH AYURVEDA INTERVENTION - A CASE REPORT

Ranju Mohan¹, Subin V. R²

¹PG Scholar, ²Assistant Professor,
Department of Panchakarma, VPSV Ayurveda College, Kottakkal, Kerala, India

Email: ranjujust4me@gmail.com

ABSTRACT

Vocal cord paralysis is a voice disorder which occurs when one or both vocal cords doesn't open or close properly. No underlying cause for the condition can be found in most cases. Symptoms of vocal cord paralysis include changes in the voice, such as hoarseness or a breathy voice, ineffective coughing, pain in throat when speaking, dysphagia, sore throat, aspiration etc. In Ayurveda, it can be correlated with *Swarasada* basing on clinical presentation. It is a condition where alteration of the voice is brought as revealed during speech and announcing with high or low pitch, inaudible or distinct sound. Due to various *Nidana* like *Atyuchabhashana* (speak in loud voice), *Abhighata* (injury), *Soka* (grief) etc., the aggravated *Dosha* invade and localise in the *Sabdavahisira* (vocal cords) and bring about the changes in the functions of the voice box and causes *Swarasada*. Here, a case report of 43-year-old female presenting with symptoms of difficulty of speaking and low pitch sound, the condition diagnosed as left vocal cord paralysis w.s.r. to *Swarasada* is narrated. CT of brain showed that she had left vocal cord paralysis. The patient underwent *Panchakarma* procedures like *Nasyam*, *Vennathalam*, *Gandoosha* and with administered selected *Samana* medicines (elimination therapy medicines). After one month of follow up, patient regained her original voice. Many modern treatments are prescribed for vocal cord paralysis, but the effect of these treatments is temporary. This case report shows how left vocal cord paralysis w.s.r. to *Swarasada* was successfully managed with *Panchakarma* procedures and *Samana* medicines mentioned in *Chiktsamanjari*.

Keywords: Vocal cord paralysis; *Swarasada*; *Vennathalam*; *Gandoosha*; *Nasya*

INTRODUCTION

Vocal cord paralysis also known as vocal cord paresis, is the inability of one or both vocal cords (vocal folds) to move, has incidence of 0.42%. It is more common in women compared with men. No underlying cause for the condition can be found in most cases, it may be caused by congenital, injury to the neck, tumours of the

skull base, infection and associated with certain neurogenic conditions like multiple sclerosis or Parkinson's disease, or who have sustained a stroke etc. If vocal cords are inflamed, they become paralyzed and can't work properly and may develop a voice disorder.

Treatments of vocal cord paralysis include voice therapy, bulk injections, surgery and a combination of these

treatments. But these treatments are very expensive and have only temporary effect, so it is the need of the hour to think about an alternative management. According to *Ayurveda*, symptoms can be correlated to *Swarasada*. 6 types of *Swarasada* are mentioned in our classics. Due to *Nidana* like *Abhighata* (injury), excessive use of sound (*Athyuchabhashana*), grief etc., *Dosha* get aggravated, invade the *Sabdavahisira* (vocal cords) and get lodged in *Kantasthana* (throat region) causing the disease. Generally, *Nasya*, *Dhooma*, *Snehasweda*, *Gandoosha*, *Kabala* and *Samana* medicines are described for *Swarasada*. In some of the popular Keraleeya books different *Samanayoga* for *Swarasada* are mentioned, the drugs are easily available and found to be effective in *Swarasada*. One of the easily available drug combinations was selected along with procedures like *Ksheeradhooma*, *Thalam*, *Gandoosha* and *Nasya*. In this case study, after ten days of IP management and one month follow up patient regained her original voice.

CASE DETAILS

A 43-year-old female school-teacher, admitted in the IPD of Vaidyaratnam P S Varier Ayurveda College,

Kottakkal with complaints of difficulty of speaking, low pitch sound and throat discomfort. The history revealed that, four months ago, one day after returning from school she felt throat discomfort and pain in throat. Next day she consulted an allopathic physician and took medicines. Gradually within one month she lost her voice, doctor suggested to do laryngoscopy and CT scan and diagnosed as left vocal cord paralysis. Then she continued the prescribed medications, but no improvements noted.

On examinations of CNS – all findings were found to be normal

CNS examination findings

Higher mental functions – intact

Motor system (bulk, tone, power, reflex, co-ordination) – intact

Sensory system – intact

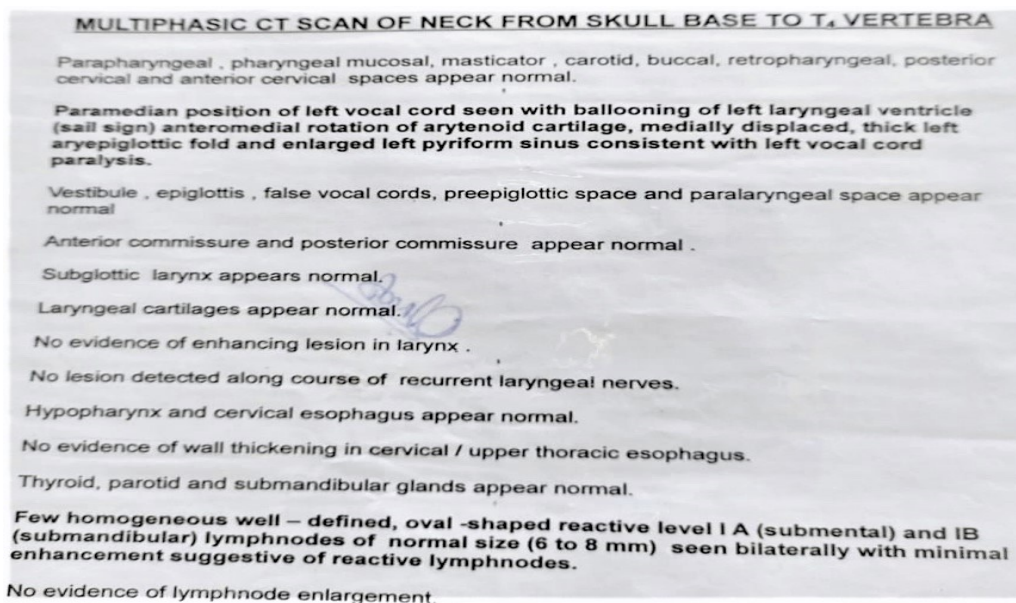
Cranial nerves – intact

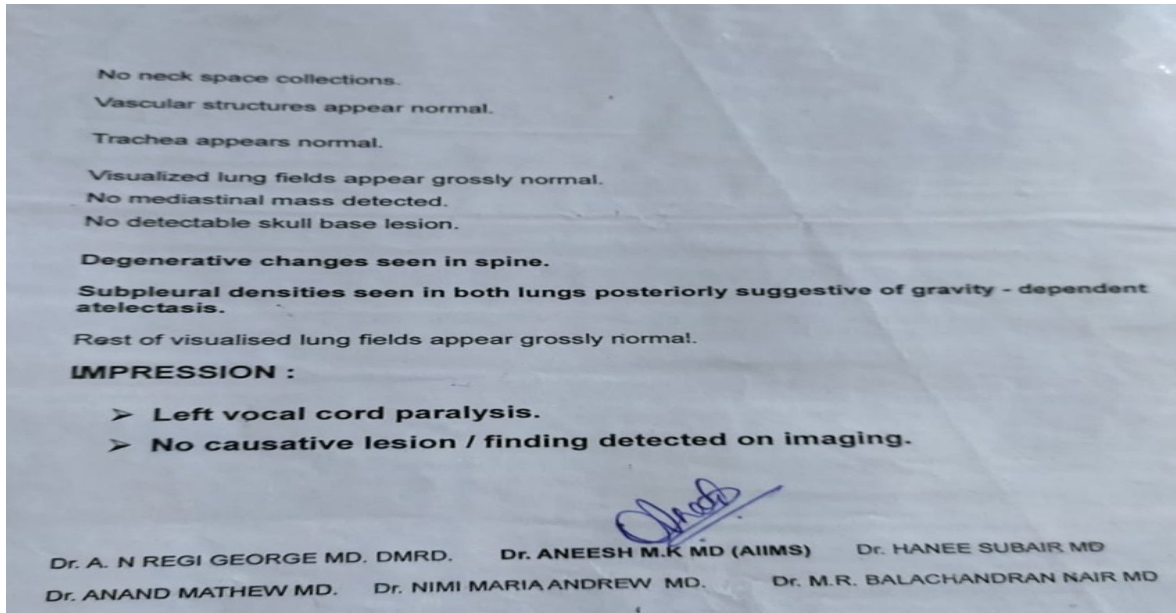
CT Scan of neck from skull bases

Findings

1. Left vocal cord paralysis

2. No causative lesions/ finding detected on imaging





Therapeutic Strategy

The patient was subjected to the following line of treatment. The scheduled treatments are mentioned below

Table 1

Procedure	Medicine	Dose
<i>Nasya</i>	<i>Anu Thaila</i>	3days - 1 ml, 2days - 1+1 ml, 2 days - 2+1 ml
<i>Ksheeradhuma</i>	<i>Balaksheera Kwatha</i>	1 litre
<i>Thalam</i>	<i>Bala Churnam+ Navaneetham</i>	5 grams
<i>Gandoosham</i>	<i>Ksheerabala Thailam+ Hot water</i>	10 ml <i>Thaila</i>

Table 2: Internal Medicines

Medicine	Dose	<i>Anupana</i>
1. <i>Nayopayam Kashayam</i>	90 ml	
2. <i>Dhanwantharam Gulika</i>	1 tab	<i>Kashaya (1)</i>
3. <i>Ashtavargam Kashayam</i>	90 ml	

Table 3: Discharge medicines

Medicine	Dose	<i>Anupana</i>
1. <i>Hamsapathyadi Kashayam</i>	15 ml	45 ml hot water
2. Special <i>Churnam</i> (fried <i>Nellipathram</i> (gooseberry leaf) and <i>Bandhujeevapatram</i> (Hibiscus leaf) in ghee)	5 grams	<i>Hamsapathyadi Kashayam</i>
3. <i>Bala Thaila</i>	10 drops	<i>Hamsapathyadi Kashayam</i>
4. <i>Vennathalam</i>	Continue	
5. <i>Gandoosham</i>	continue	

Follow up medicines

After 1 month

1. Tab *Medha* 1Hs
2. *Saraswatha Ghritam* 10ml+ 10 drops honey – in empty stomach
3. *Gandoosham – Ksheerabala Thaila* 10 MI + hot water

Outcome of Treatment

Patient was satisfied with treatment. The treatment started with *Nasya* and *Ksheeradhuma* for seven days. Patient felt lightness in throat region during that time. Also, slight improvement was noted in the clarity of voice. Then *Vennathalam* and *Gandoosham* prescribed for three days, at that time no changes noticed. Patient

was discharged after ten days of IP management and advised one month of medication which included internal medicines and *Vennathalam* and *Gandoosham*, after one month she got satisfactory relief. Her sound became clear. But she had complaint of throat discomfort and hoarseness of voice occasionally. Then, she was advised *Samanasnehapana* and *Gandoosha* for one more month, after that patient had no complaints of throat discomfort, hoarseness of voice and she regained her original voice. After 6 months, patient reported with complaints like hoarseness of voice and throat discomfort, she took 1 course of IP management. Details of management are given below

Table 4: Internal Medicines

Medicine	Dose	Time
<i>Gandarvahastadi Kashayam</i>	15ml+45ml hot water	6.00 A.M
<i>Bhadradarvyadi Kashayam</i>	15ml+45ml hot water	6.00 P.M
<i>Vasarishtam</i>	25ml	After food 2 times
<i>Thalesapathradi Churnam</i>	5grams	Frequently
<i>Chukkumthippalyadi Gulika</i>	1	2times after food

Table 5: IP Management- patient was subjected to following line of treatment.

Procedure	Medicine	Dose	Days
<i>Nasyam + Thalam</i>	<i>Ksheerabala Thaila</i>	3days -1ml, 2days-1+1ml, 2days -2+2ml,	7days
<i>Ksheeradhuma</i>	<i>Balaksheera Kwatha</i>	1litre	7days
<i>Urovasthi</i>	<i>Ksheerabala Thaila</i>	Q. S	7days
<i>Siropichu</i>	<i>Ksheerabala Thaila</i>	Q. S	7days

Discharge Medicine

1. *Saribadi Kashayam* 100ml bd [Ingredients – *Sariba*, *Ardra*, *Mridwika*, *Yashtee*, *Mustha*, *Sathavari*, *Vri*, *sha*, *Jeevanthi*, *Ikshu* prepare *Kashaya* as of general method]

DISCUSSION

The clinical symptoms like low pitch sound, throat discomfort and hoarseness of voice can be correlated with *Tridoshaja Swarasada* with *Vata* predominance. The affected *Dhatu* are *Rasa*, *Mamsa* and *Srotas* is *Pranavaha*. Affected *Dosha* are *Pranavatha*, *Udanavatha*, *Vyanavatha* and *Tharapakakapha*. The general line of

management of *Swarasada* was followed with *Nasya*, *Dhuma*, *Gandoosha* and *Snehasweda* along with appropriate internal medications. Internal medicines started with *Nayopayam Kashayam* and *Dhanwantharam Gulika*. *Nayopayam Kashayam* having *Deepana* (appetizer) *Pachana* (digestant) and *Srothosodhana* (Clear the body channels) property and *Vathakapha Samana* (alleviate vatha and kapha) in action. Air way conduction during speech is modulated by *Pranavahasrothas*, airway resistance and *Pranavilomatha* (movement of *pranavayu* in opposite direction) is corrected by this medication. Removal of obstruction in *Pranavahasrothas* and *Vathanulomatha* (movement of

vata in proper direction) is brought by *Nayopayam Kashayam* and *Dhanwantharam Gulika*. The other internal medicine prescribed was *Ashtavargam Kashayam* also having *Kaphavatasamana* (alleviate *kapha* and *vata*), *Vatanulomana*, *Deepana* and *Srothosodhana* properties. IP management started with *Nasya* and *Ksheeradhuma*. *Swarasada* is an *Urdwajathrugatha* (part above neck) *vikara*. *Vakpravrutthy* (production of sound) is the function of *Udanavatha* and *Kanda* (throat) is the route of *Pranavata*. So, by considering vitiation of both *Udanavata* and *Pranavata* & the *Sthanic Dosha* which is *Tharpaka kapha* and *Alochaka Pita*—*Nasya* is beneficial. *Nasya* is beneficial for delivering the therapeutic agents into the CNS, through thus the nerve supplied to the vocal cords are nourished and it will eradicate the vitiated *Dosha*.

Anu Thaila was selected for this purpose. It has *Brimhana* (stoutening) and also *Tridoshahara* property. In *Yogamritha*, direct indication of *Ksheeradhuma* is seen in *Swarasada* cases. *Ksheeradhuma* not only serves the purpose of *Swedana*, enhancing better absorption of *Nasya* drug, but also the drug present in this help in alleviation of *Vatha* and *Kapha* and break the *Srothorodha* (obstruction in channels). *Vennathalam* is the procedure traditionally practised by keraliya physician and is indicated in *Arditha* (Facial Palsy). In *Thalam* medicines is applied on the shallow depression over the head (Bregma), *Sringatakamarma* are located in this place containing *sira* (nerves) which nourish the sense organs. In this area speech centres of brain are located. *Vennathalam* applied to this site, nourishes the *sira* to throat region and improves the function of sense organs. The medicines used for *Vennathalam* are *Navaneetha* (Butter) and *Bala Churna* (powder of *Sida Cordifolia*) both having *Vathapitha Samaka* (alleviation of *vatha* and *pitha*), *Balya* (strengthening), *Brimhana* and nerve nourishing actions.

Gandusha (Buccal retention of medicines) is generally indicated treatment for *Swarasada*, *Swarabala* (strength to voice) is the main benefit of *Gandoosha*. *Ksheerabala Thaila* having *Vatapitta Samana*, *Brimhana* and *Indriyaprasadana* (pleasing of sense organs)

actions. While mixing *Ksheerabala Thaila* with *Ushnodaka* (hot water) it will have the benefit of *Vakthra Laghavam* (lightness in mouth).

After ten days of IP management patient was discharged and advised to continue *Vennathalam* and *Gandoosham* for one month. A *churna* prepared with leaf of *Dhatri* (Gooseberry) and *Japa* (Hibiscus), is a *Yoga* (Formulation) mentioned in *Chikitsamanjari* for improving the quality of sound. Both drugs having *Vatakaphahara* action. *Hamsapathyadi Kashayam* described in *Galagandagandamalaadhikara* (goitre), it is having *Tridoshahara* and *Sthanic* action on *Kanta*. *Bala Thaila* mention in *Vatavyadhi* having *Tridoshahara* especially *Vatasamana* and *Brimhana* action.

After one month, advised patient to continue the *Gandoosha*. In follow up *Samanasnehapana* was done. The drug selected for *Snehapana* (Internal administration of oil, ghee etc) was *Saraswatha Gritha* having direct indication like *Vakvisudhikara* (clear the sound) and *Swarya* (improve sound) and most of drugs having *Vathakaphasamana* actions. Patient complained of sleep disturbance during this period, prescribed *Medha* tablet. The ingredients like *BocapoMonnieri*, *Centellaasiatica*, *Withaniasomnifera*, *Acorus calamus* etc having psychogenic and brain tonic action.

After 6 months, patient had complaints of hoarseness of voice and she had difficulty to shout. Again, one course of IP management done for 14 days. IP management started with *Nasyam* and *Ksheeradhuma*, for *Nasya Ksheerabala Thaila* was selected.

Urovasthi is the special treatment explained in the context of *Bhaktharodha* (Aversion towards food) in *Yogamritha* and *Chikitsamanjari*. Black gram dough placed on chest and filled with *Ksheerabala Thaila*. *Ksheerabala Thaila* having action of *Indriyaprasadana* and *Swarya* action.

After 14 days IP management patient was discharged and advised to take *Saribadi Kashayam*. *Saribadi Kashayam* a special *Kashaya Yoga* mentioned in *Chikitsamanjari* in the context of *Swarasada*.

CONCLUSION

This case study shows that selected *Panchakarma* procedures and internal medications are effective in the management of *Swarasada*. The internal medicines used for this condition is easily available and cost effective. This case study demonstrate that Ayurvedic management may help to regain voice and improve the quality of voice in Vocal cord paralysis. Though a single case study may not be enough to prove significance of any treatment but gives us an idea for the line of treatment adopted in such cases and helps to formulate a protocol.

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