

## AYURVEDIC MANAGEMENT OF UPPER MOTOR NEURON FACIAL PALSY: A CASE REPORT

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### ABSTRACT

Facial palsy is emphasized as weakness of the facial muscles, mainly resulting from temporary or permanent damage to the facial nerve. Facial palsy may be of the upper motor neuron type or lower motor neuron type. A lower motor neuron lesion occurs with Bell's palsy, whereas an upper motor neuron lesion is associated with a cerebrovascular accident, presenting a case of upper motor neuron facial palsy. No satisfactory treatment is available in modern medicine for this ailment. Based on similarity of symptoms it is taken as *arditavata* in *ayurveda*. Various *Panchakarma* procedures like *shirovasthi*, *nasya* and Ayurvedic herbo-mineral formulations like *rasaushadis* have been used in presenting case and successfully treated the ailment.

**Keywords:** Upper motor neuron facial palsy; *arditavata*; *panchakarma*; *sirovasthi*; *nasya*, *rasaushadis*.

### INTRODUCTION

Facial palsy is mainly emphasized as weakness of the facial muscles resulting from temporary or permanent damage to the facial nerve. It may be of two type's i. e upper motor neuron palsy and lower motor neuron palsy. It is important to differentiate between upper motor and lower motor neuron lesions of facial nerve. The causes of facial palsy are compression of facial nerve by edema, periostitis at the facial canal, ischemia of the nerve or a viral infection. Commonly occurring facial palsy is Bell's palsy, which is a lower motor neuron type. In upper motor neuron facial palsy only lower part of the face is involved, deviation of mouth is present, usually associated with hemiplegia, bell's phenomenon is

absent (bell's phenomenon is explained as when patient is attempting to close the eyes, the eye ball rolls upwards and outwards), speech is not effected, facial wasting or atrophy are absent. Bell's palsy usually develops suddenly and spontaneously due to idiopathic reasons. Paralysis of muscles of facial expression, weakness of pursing movements of lips, inability to hold water in mouth, deviation of the angle of the mouth to the normal side, incomplete closure of eyes and watering from the eyes etc. are the common symptoms.[1] *Ardita* is one among the 80 *Nanatmaja Vyadhis* of *Vata*. In Sanskrit the word *Ardita* literally means as "partially destroyed." As per Ayurveda, excessively aggravated *Vayu* causes

distortion in half of the face and curvature of the nose, eyebrow, forehead, eye and mandible. But *Acharyas* have different opinions about *Ardita*. *Acharya Charaka* described it as a disease affecting only face. But *Acharyas* like *Vagbhata* and *Sushruta* pointing out the involvement of half of the body also. Causes of *Ardita* have also been explained in detail in *Samhitas*. Excessive laughing, speaking loudly, chewing hard food, yawning, sneezing, carrying heavy loads on head, sudden movement of head and neck, exposure to cold and wind etc. are some of the causes for developing *Ardita*. These *Nidanans* (aetiology) leads to vitiation of *Vata* and manifestation of symptoms of *Ardita*. The symptoms include distortion of the affected side of the face, deviation of angle of mouth to the normal side, tremors of the head, shaking of tooth, incomplete closure of the eye in the affected side, distortion of the nose, difficulty in speech and hoarseness of voice, loss of hearing and impairment in smell sensation, pain in the ear, difficulty in mastication and swallowing of food etc. [2] In *Ayurveda*, treatment described for *Ardita* is safe and effective. The treatment provides strength to facial muscles, strengthens the nerves, improve the blood circulation and there will not be any recurrence of the disease. As per *Acharya Vagbhata* and *Charaka*, *Ardita* requires a nourishing type of therapy. According to *Charaka* the treatment principle is given as *Nasya Karma*, *Moordha Taila* (application of oil to the head), *Tarpana Kriya* with medicated oil to the eyes and ears, *Nadi Sweda*, *Upanaha Sweda* are included in the treatment principle of *Ardita*. [3] According to *Acharya Sushruta* the treatment should be given like that of *vatavyadhi* such as *sirobasthi* (retaining of medicated oil over the head for a stipulated time period), *nasya*, *dhoomapana* (medicated smoking), *nadi sweda* (fomentation). [4]

#### Case details:

A 44 year old, male patient, married, non-smoking, alcoholic known case of hypertension since four years consulted in the out-patient department of Panchakarma, Dr. B.R.K.R GAC, Hyderabad, for a complaint of deviation of mouth, dribbling of saliva, slurred speech, numbness of face and half of the whole body was taken for the study. Basing on all the symptoms it was taken as UMN facial palsy (*ardita*) if left untreated at this stage it may lead to persistence of symptoms permanently.

Symptoms are given below

1. Deviation of mouth
2. Dribbling of saliva
3. Slurred speech
4. Weakness of lower part of face around mouth
5. Numbness of lower part of face
6. Numbness of half of the whole body

A facial nerve function grading was assessed by House-Brookman grading system for facial palsy was used. [5] Based on the grading system, it was considered as moderately severe case of UMN Facial palsy (*ardita*). Treatment was given in two cycles.

#### Treatment:

After differentiating between UMN facial palsy and LMN facial palsy based on symptoms it is diagnose as UMN facial palsy. Treatment is carried out for two cycles by *panchakarma* procedures along with *rasaushadhis*.

#### First cycle

It includes seven days, at first in *amavastha*, *talam* with *rasnadi churna*, *shirovasti* with *brahmi taila* and *chandanataila* was done for 30 minutes followed by *pratimarsha nasya* with *anutaila* and *dhumapana* [*varti* prepared with *churnas* of *yastimadhu* (*Glycyrrhiza glabra*), *triphala* (*harithaki* (*Terminalia chebula*), *vibhitaki* (*Terminalia bellarica*), *amlaki* (*emblica officinalis*), *pippali* (*Piper longum*), *musta* (*Cyprus rotundus*), *vacha* (*Acorus calamus*), *haridra* (*Curcuma longa*) and *go-grita* (cows ghee)] was done. After that Patient was asked to apply *vacha churna* as external application over tongue with the sliced lemon.

After first cycle the following changes are observed

1. No dribbling of saliva
2. No facial muscle weakness
3. Slight deviation of mouth is present
4. Speech improved
5. No numbness of face and half of body

#### Second cycle

It includes seven days in which *sirovasthi* was continued for three days as same and stopped later *nasya* with *kseerabala taila* followed by *dhumapana* as same in first cycle and next *vachaksheera dhuma* (50 gms of *vacha churna* is added with one liter of milk added with equal amount of water) fomentation is done.

After second cycle the following changes are observed

1. No deviation of mouth
2. Complete strength of facial muscles
3. No slurred speech
4. Normal symmetry of face
5. General strength is improved

Patient was asked to visit hospital after ten days. At that time patient was normal after using *ekangaveeras*, *ksheerabala101 capsules* and advised *gandusha* with *tila taila*. He came for a review after two months and was healthy without any complaints.

## DISCUSSION

In Facial palsy, facial nerve dysfunction leads to facial muscle paralysis with impairment of both sensory and motor functions. *Ardita* is a disease caused by vitiated *Vata*. *Vata* is responsible for all motor, sensory and biological activities of body. So, sensory and motor activities can be attained by normalcy of *Vata*. Here we adopted *Brimhana* type of treatment for correcting the vitiated *Vata* as per Ayurvedic treatment principles. It improved the motor function by stimulating and strengthening the facial nerves and muscles. The internal medicines selected were *Vatavyadhi Shamana* drugs. The treatment started with *Amapachana* as a general line of treatment. *Thalam* was performed for this purpose. The drugs selected for the treatment were *Ras-nadiChoornam* which has anti-inflammatory properties. In *nasya* as a *poorvakarma* *Abhyanga* and *tapa sweda* was done. *Abhyanga* stimulate the nerves by increasing neural conductivity through piezoelectricity (it was derived from friction and pressure, physical pressure causing electrical charge to the body). When utilizing a medium of unctuous substance to reduce the friction with a good amount of rhythm, a specific pressure will develop and creates magnetic field and electricity in the body. By such charging of conductivity of nerves will increased, this may go up

to 100 meters per second. In nerve fiber, electricity is discharged at regular intervals and moves in circular pattern. Interruption to the momentum results into the state of disease, which can be rectified by giving *abhyanga* (massage) with particular pressure. It gave passive exercises to muscles there by strengthening them. The gentle pressure used during massage relaxes the muscles. It also provides the sensory motor integrity. [6]Here *Ksheerabala Taila*, which is indicated in *vataroga*, was selected. *Swedana* liquifies the deranged *Doshas* and facilitate their expulsion by subsequent *Panchakarma* procedures. Here we adopted *Ksheeradhuma* with *Vacha* considering its properties. *Nasya* is indicated in all *urdhwajatrugata rogas*. According to *charaka* for the treatment of diseases of head one should administer *nasyakarma* because nose is the gateway of the head. [7] In *Astanga Sangraha* it is mentioned that the drug administered through nostrils reaches *sringataka* (a *sira marma* by *nasa srota*) spreads in the *murdha* (brain) through the *siras* of *netra* (eye), *karna* (ear), *kantha* (throat) and reaches *shiras*. [8]The *Nasya Oushadhi* (Nasal drug) having oil base is easily absorbed across the mucosa, as it is highly lipophilic in nature. It could either stimulate the nerve endings, thereby stimulating the higher centres of brain, or reach their via Trans-Neuronal Pathway [9]. *Taila* being *sukshma*, *tikshna* and *ushna* in nature penetrates deep into the tissues, and may transport the drug across the tract. Here we selected *Ksheerabala taila*, which is again indicated in *vataroga*. After *Nasya*, *Dhumapana* and *Kavala* was done for clearing the remaining *Doshas*. Massage, heat and pressure during this procedure give nourishment to muscles and nerve endings. *Shirovasthi* is a type of *moordha taila*. Chronologically *sirovasthi*, *pichu*, *siroseka*, *siroabhyanga* are less potent one another in order. *Sirovasthi* is indicated in *vata* disorders by *sushruta*. *Tailam* used in here is *brahmi taila* and *chandana taila*. *Taila* is best *vatahara* where *ardita* is one of the *vatavyadhi*. In *shirovasthi* both *sneha*, *sweda* are done simultaneously which pacifies *vata*.

## CONCLUSION

The patient was evaluated based on his symptoms as suffering with Upper motor neuron facial palsy and treated according to Ayurvedic principles. The grading done according to modern prin-

ciples also matched very well with the results. Moderately severe grading (grade 4) done according to house- brookman scale was reduced to normal (grade 1) stage. From the study we can conclude that Upper motor neuron palsy can be successfully managed by Ayurvedic treatment with lesser chance of recurrence and without any side effects.

## REFERENCES

1. KV Krishnadas, Textbook of Medicine, Fourth edition, Vol.2, Reprinted edition, Jaypee Brothers Medical Publishers, New Delhi. 2004:942.
2. Vagbhata, Astanga Hridayam, Text with English translation and notes, translated by Prof. K. R. Srikanta Murthy, Vol.2, Chikitsa Stana, reprinted edition, Chowkambha Krishnadas Academy, Varanasi. 2013:505.
3. Agnivesa, Charaka Samhita, Text with English translation and critical exposition based on Chakrapani Dutta's Ayurveda Deepika by Dr. Ram Karan Sharma & Vaidya Bhaagvan Dash, Vol.5, Chikitsa sthana, reprint edition, Chaukhambha Sanskrit Series, Varanasi. 2004:31.
4. Sushruta Samhitha with English translation of text and Dalhanas commentary edited and translated by Priya Vrat Sharma, Vol.2, Chikitsa Stana, reprint edition, Chowkambha Visvabharathi, Varanasi. 2005:321.
5. HouseBrackmannscoreWikipedia,the freeencyclopedia, [https://en.wikipedia.org/wiki/House%E2%80%933Brackmann\\_score](https://en.wikipedia.org/wiki/House%E2%80%933Brackmann_score).
6. Patil.c.vasant, Principles and practise of panchakarma, 2010, Atreya Ayurveda publications, page139
7. Agnivesa, Charaka Samhita, Text with English translation and critical exposition based on Chakrapani Dutta's Ayurveda Deepika by Dr. Ram Karan Sharma & Vaidya Bhaagvan Dash, Vol.6, Siddhi sthana, reprint edition, Chaukhambha Sanskrit Series, Varanasi. 2004:31.
8. Vagbhata, Astanga Sangraha, Text with English translation and notes, Translated by Prof.K. R. Srikanta Murthy, Vol.1, sutra Stana, reprinted edition, Chowkambha Krishnadas Academy, Varanasi. 2013:505.
9. Brain targeting by intranasal drug delivery (INDD): a combined effect of trans-neural and para-neuronal pathway, <https://www.ncbi.nlm.nih.gov/pubmed/24959938>
10. Gautam Srivastava, Essentials of Oral Medicine, 1<sup>st</sup> edition, Jaypee Brothers Medical Publishers, New Delhi. 2008:220.

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