

# WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.453

Volume 13, Issue 21, 763-773.

Case Study

ISSN 2277-7105

# A CASE STUDY ON THE MANAGEMENT OF FACIAL PARALYSIS (ARDITA) IN AYURVEDIC INTERVENTION

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Article Received on 07 September 2024,

Revised on 28 Sept. 2024, Accepted on 18 October 2024

DOI: 10.20959/wjpr202421-34369



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#### **ABSTRACT**

Introduction: Ardita It is classified as a Vata disorder and is included among the eighty types of Vataja Nanatmaja Vyadhis. This condition results from the aggravation of Vata Dosha. In terms of its clinical presentation, it can be compared to Bell's Palsy as described in modern medical texts. Symptoms can include pain around the ear sometimes extending to the back of head or neck, altered taste, synkinesis, facial spasm, facial contractures, dysfunctional lacrimation and noise intolerance. Bell's palsy occurs in 20-30 cases per 100,000 people in India, accounting for about 70% of all occurrences of unilateral peripheral facial palsy. Material and Methods: This single case study deals with a 31-year-old female patient having history of deviation of mouth to left side, incomplete closure of right eye, asymmetry of face since last 1 day was registered in our OPD. Complete history and clinical evaluation lead to the diagnosis of facial nerve paralysis i.e.

Bell's palsy. based on the patient's signs and symptoms, treatment was administered following the approach for *Ardita*. This included *Nasya Karma* using *Anu Taila*, *Karna Purana* with *Bilvadi Taila*, *Gandusha* with *Irimedadi Taila*, and *Shirodhara* with

Dhanwantara Taila, in addition to prescribed oral medications. **Result:** The House – Brackman facial nerve grading system was used to assess the clinical features before and after the treatment. The result showed significant improvement in motor functions and asymmetry of face. After the treatment gradation improved from grade 4 to grade 1. Based on the results, the study concluded that comprehensive management with *Nasya*, *Gandusha*, and *Karna Purna* and *Shirodhara* is effective in managing *Ardita Roga*.

**KEYWORDS:** Ardita, Bell's palsy, Nasya, Shirodhara, Gandusha.

# INTRODUCTION

In the Ayurvedic Classics among the eighty varieties of Nanatmaja Vata Vyadhis, Ardita is one of them.<sup>[1]</sup> When *Vata* is functionally normal, it is responsible for stimulating the sense organs in the body, [2] but when it is in abnormal state, it can cause morbidity and mortality. [3] Ayurvedic scriptures include the following as causative causes for Ardita disease: resting on an uneven sleeping surface and consuming hard food items., laughing excessively, talking loudly, suddenly becoming afraid, and shifting considerable weight on the head.<sup>[4]</sup> Clinical signs include slurred speech, food particles getting trapped in between the gums and cheeks, hearing deformity, and a half-sided facial deformity affecting the nose, eyebrows, forehead, eyes, tongue, and chin areas on the affected side, [5] partial closure of eyes, [6] disturbed smell sensation, pain in supraclavicular part of body. [7] Based on these clinical findings, this condition is similar to Bell's palsy. Acute facial palsy is a neurological condition marked by an abrupt onset of hemifacial paralysis caused by a damage to a lower motor neuron in the facial nerve. Because of facial asymmetry, this issue not only results in functional deficits including the inability to smile, blink, or speak clearly, but it also has an aesthetic impact. A reduction in tear production and alterations in taste or salivation may also be experienced by some afflicted persons. A patient's quality of life may suffer as a result of these coexisting symptoms.[8]

The reported annual incidence varies around the world, ranging from 11 to 40 per 100,000 individuals.<sup>[9]</sup> Bell's palsy occurs in 20-30 cases per 100,000 people in India, accounting for about 70% of all occurrences of unilateral peripheral facial palsy.<sup>[10,11]</sup> Without treatment, 71% of Bell's paralysis patients fully recover their motor function in less than six months.<sup>[12]</sup> The following treatments are listed in Ayurvedic texts: *Murdha Taila* (Oleation of the head), *Nadi Sweda* (sudation), *Upnaha* (bandaging), and *Santrpana Ahara* (diet boosting strength and weight).<sup>[13]</sup>

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NEED OF THE STUDY

1. for more pinpoint and precise management.

2. for better results.

3. for research purpose.

4. to know more about the disease.

5. for improving the further management and process of treatment.

**CASE REPORT** 

In august 2023 a 31 year old female patient came with complaint of deviation of mouth to left

side and difficulty in opening of one eye, as well as slight difficulty in speaking, eating, and

drinking from past one day, she has history of Migraine from past few months. The episode

of the disease associated with earache on right side and then suddenly drooping of the eye

and deviation of the face occurs during eating food. There was no history of diabetes,

hypertension, dengue, malaria, or any other infectious disease.

She approached Panchkarma Outpatient Department, Government Ayurveda Research

Center, Gulab Bagh, Udaipur. affiliated to Madan Mohan Malviya Government Ayurveda

College, Udaipur, Rajasthan, India for ayurvedic treatment. The patient's evaluation includes

vitals check and Ashtavidha Pariksha. (eight systemic examination) were done and after

getting written consent of the patient treatment was started on IPD level.

**Personal history** 

Appetite: normal

Food habits: non vegetarian diet, intake of spicy food.

Sleep: disturbed sleep due to stress.

Bowel habit: constipated

Addiction: Consumption of tea thrice or twice a day from last 20 years. No other substance

abuse.

**Family history:** Grandfather has similar history of paralysis.

**Past history:** No history of trauma. History of migraine from past few months and history of

excessive stress is there.

**Medical history:** No relevant history of medication.

**General examination:** On physical examination appearance was abnormal and her left side face was deviated.

# Vitals examination

Blood pressure	140/90 mm of hg
Pulse	72/min Regular
Respiratory rate	14
Temperature	$37.4^{\circ}$ c

Diagnostic criteria: patient was diagnosed on the basis of clinical features and examination.

# Samprapti (Pathogenesis)

The disease is mainly caused by vitiated *Vata Dosha*, which arises from excessive exposure to cold winds. The *Prakupita Vata* (aggravated *Vata*) sits in the *Sandhi* of *Shira* (head), *Nasa* (nose), *Hanu* (mandible), *Lalata* (forehead), and *Netra* (eye). The *Vata* influence *Snayu* (ligaments) and *Kandara* (tendons), which manifest symptoms on the right side of the face along with all the characteristics of *Ardita Vata*. In modern research, this ailment is comparable to Bell's palsy, a facial nerve palsy that manifests with the symptoms listed above.

# **Demographic details**

Age.	31 years
Sex.	female
OPD number	1570
IPD No.	25
Occupation	housewife
Marital status	married
Socioeconomic status	middle class
Weight	82 kg
Height	5 feet

# Ashtavidha Pariksha

Nadi (Pulse)	Prakrita
Mala (Stool).	Vibandha
Mutra (Urine).	Pale Yellow
Jivha (Tongue).	Malavrata (Coated)
Shabda (Speech).	Aspashta (Slurred speech)
Druka (Eyes).	Vaikrita (right eye partially close)
Aakruti (Appearance).	Vaikrita

Assessment criteria: Table 2: House-Brackmann Facial Nerve Grading Scale.

House-Brackmann Facial Nerve Grading Scale			
Grade	Defined by		
Normal	Normal facial function in all areas		
Mild dysfunction	Mild weakness is observed, noticeable only upon close examination. At rest, the forehead appears normally symmetrical, with the ability to close the eye requiring minimal effort and showing slight asymmetry. There is also slight asymmetry when moving the corners of the mouth with maximum effort. No signs of synkinesis, contracture, or hemifacial spasm are present.		
Moderate dysfunction	There is a noticeable but non-disfiguring difference between the two sides of the face, without functional impairment. Synkinesis, contracture, and/or hemifacial spasm are present but not severe. At rest, normal symmetry and muscle tone are observed. During movement, there is minimal to no movement in the forehead, the eye can be closed with maximal effort but shows obvious asymmetry, and the corners of the mouth also move with maximal effort but with clear asymmetry. Patients showing noticeable, though non-disfiguring, synkinesis, contracture, or hemifacial spasm are classified as grade III, regardless of their motor function level.		
Moderately severe dysfunction	Clear weakness and/or noticeable asymmetry. At rest: normal tone and symmetry. With movement: no forehead motion and inability to close the eye. completely with maximal effort. Patients experiencing synkinesis, mass action, or hemifacial spasm severe enough to impact function are classified as grade IV, regardless of their motor activity.		
severe dysfunction	Movement is barely noticeable. At rest, there may be some asymmetry, such as a drooping corner of the mouth and a diminished or absent nasolabial fold. During motion, there is no forehead movement, incomplete eye closure, and only minimal movement of the eyelid. With maximal effort, there is slight movement at the corner of the mouth. Synkinesis, contracture, and hemifacial spasm are typically absent.		
Total paralysis	Loss of tone; asymmetry; no motion; no synkinesis, contracture, or hemifacial spasm.		

Grade	Function level	Symmetry at rest	Eye	Mouth	Forehead
1	Normal	Normal	Normal	Normal	Normal
2	Mild	Normal	Easy & complete closure	Slightly asymmetrical	Reasonable functions
3	Moderate	Normal	With effort complete closure	Slightly affected with efforts	Slight to moderate movements
4	Moderately severe	Normal	Incomplete closure	Asymmetrical with maximum effort	none
5	Severe	Asymmetry	Incomplete closure	Minimal movements	none
6	Total paralysis				

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**Diagnosis:** *Ardita* (Bell's palsy classified as Grade 5 on the House-Brackmann Facial Nerve Grading Scale.).

#### **Cranial nerve examination**

On examination of patient superficial and deep reflexes were normal all the cranial nerves are intact and functioning well except  $7^{th}$  cranial nerve i.e. facial nerve.

Forehead frowning – affected on right side.

Eyebrow raising – affected on right side.

Eye closure – Right eyelid -incompletely closure.

Teeth showing -unable to show on right side.

Blowing of cheek – unable to do on right side.

Nasolabial fold - No Nasolabial fold seen on right side.

Taste perception – unaffected.

Dribbling of saliva – seen.

Bells phenomenon – present on right side.

Deviation of mouth towards left side.

# **MANAGEMENT**

Step 1: *Virechana* (purgation) with *Eranda Taila* in the dose of 35 ml, with warm water, was administered on the third day after admission following *Abhyanga* and *Swedana* for two days. *Koshtha* was assessed on the basis of patient's bowel habits and sensitivity.

Step 2<sup>nd</sup> Management of fascial paralysis.

Treatment for facial paralysis commenced as soon as the patient was brought to *Panchkarma* OPD. Patient was prescribed the following *Panchakarma* Procedures along with oral Ayurvedic medications [mentioned in Table no. 3 & 4 respectively]. The patient was given instructions to follow stay out of the wind, sun, dust, etc. during the four months of treatment and follow-up.

Step 3<sup>rd</sup> management of facial paralysis

Procedure	Medication	Dose	Duration
Karna Purna	Bilvadi taila	3 drops in each nostril	14 days
Gandusha (gargling)	Irimedadi Taila	100 ml	15 <sup>th</sup> to 21th day (7 days)
Nasya	Anu taila	8 drops in each nostril	1 to 14 days (14 days)
Shirodhara	Dhanvantar Taila		15 <sup>th</sup> to 21th day (7 days)

#### **Oral medication**

Oral medication was administered as mentioned in the table.

Table 4: oral medication.

Medicines	Dose	Route	Anupana
Ekangveer Rasa	250 mg twice a day after meal	Oral	With honey
Mahavatavidhavansan Rasa	250 mg twice a day after meal	Oral	With honey
Amrutadi kawtha	10 gm	Oral	
Madhukadi Yoga	5 gm	Oral	
Chitrakadi Vati	2 tabs thrice a day	Oral	

# Pictures showing before and after treatment

**Before After** 



# **DISCUSSION**

n this study, the patient was a middle-aged woman with no co-morbidities, clinically diagnosed with *Ardita* (Facial Palsy). The condition arises due to the aggravation of *Vata* and depletion of *Dhatus*. To address this, *Brihana Chikitsa* was applied to balance *Vata Dosha* and nourish the *Dhatus*. *Marsha Nasya* therapy was administered using *Anu Taila* over a period of 14 days, beginning with 8 drops in each nostril and gradually increasing to 12 drops per nostril. In *Nasya*, medicated oil or powder is administrated through the nostrils. In *Nasya*, medicated oil or powder is administered through the nostrils. As mentioned in the *Ashtang Hridaya*, "*Nasa Hi Shirsodwaram*," meaning the nose is the gateway to the head. The

medication delivered through the nostrils reaches the *Shringataka Marma* and is distributed throughout the *Murdha* (head), *Netra* (eyes), *Shrotra*(ears), and *Kantha*(throat) via their channels, clearing harmful *Doshas* from the *Urdhva Jatrugat Pradesha* and nourishing the head. Before *Nasya*, *Abhyanga* with *Mahanarayan Taila* and *Nadi Swedana* were performed as preparatory steps (*Purvakarma*), which helped improve drug absorption, eliminate *Doshas*, and enhance circulation. In this case, administering the medication while the head is positioned low ensures that the medicine remains in the nasopharynx, increasing its effectiveness. It possesses *Sukshama- Vyavayi Guna*, which facilitates *Srotoshodhana* and good spreading property. It also possesses anti-inflammatory and immunomodulation properties. Due to the virtue of its *Tikta-Katu- Madhura Rasa*, it promotes the nourishment of *Dhatu* which ultimately increases local immunity (mucosal health). This immunomodulatory property can help in reducing recurrent episodes. [17]

Shirodhara was done with, Dhanvantar Taila is also described as Tridoshara, Vedanasthapana, and Shothahar. Shirodhara is an Ayurvedic procedure widely used as rejuvenating therapy, where medicated oils or decoction are steadily poured from a certain height onto the forehead in a steady flow (stream). It is mentioned as a Bheda of Murdha Taila in Ashtang Hridaya. This helps in mental relaxation by reducing stress and induces sleep, therefore, indicated in neurological and psychosomatic disorders. The Sthana of Chitta (Mana) is mentioned Bhrumadhya i.e., Sthapani Marma in Bhela Samhita. The site of Sthapani Marma, pituitary gland, and pineal gland exist at the same level. Thereby, the effect on the psychosomatic level could be attributed to the stimulation of Sthapni Marma and the indirect stimulation of the pituitary gland.

The continuous flow of warm liquid on the forehead during *Shirodhara* may cause mild vasodilation, improving blood circulation to the brain. This process likely creates a steady pressure and vibration, which is amplified by the hollow sinus in the frontal bone. These vibrations are transmitted inward through the cerebrospinal fluid. Some research suggests that the continuous pressure from the *Dhara* modulates nerve stimulation and impulse conduction. This nerve stimulation, through the autonomic nervous system, triggers the production of chemical substances like acetylcholine (in its inactive form), which are then activated by the nerve impulse vibrations generated by the steady flow of liquid over the forehead, further stimulating nerve endings. This results in reduced activity of the central nervous system, promoting mental tranquility and enhancing the anti-stress benefits of *shirodhara*. [22]

Gandusha with Irimedadi Taila -Mukhavakrata is a key characteristic of Ardita, so to strengthen the facial muscles weakened by Prakupita Vata Dosha, Irimedadi Taila Gandusha are used. These oils possess Vatahara properties, and Snigdha Gandusha is recommended for Vata Dosha.<sup>[23]</sup>

Additionally, Ekangveer Rasa was selected for oral administration because it helps pacify aggravated Vata Dosha through its sweet taste (Madhura Rasa), oily nature (Snigdha Guna), hot potency (Ushna Veerya), and sweet post-digestive effect (Madhura Vipaka). It also balances aggravated Kapha Dosha with its bitter, pungent, and astringent tastes (Tikta-Katu-Kashaya Rasa), light and dry qualities (Laghu-Ruksha Guna), hot potency, and pungent postdigestive effect (Katu Vipaka). Ekangveer Rasa works to clear blockages in the channels (Srotorodha) caused by Ama and Kapha and reduces nerve damage through its Amapachana (digesting toxins) and anti-inflammatory actions. Its potential antioxidant properties may also alleviate oxidative stress caused by free radicals. Brahmi Vati, known for its effects as a nervine tonic, anxiolytic, and cognitive enhancer, is often recommended for psychosomatic conditions and stress-related disorders. Conclusion. After four months of treatment, problems such as eye closure (95%), speech (100%), and difficulty eating and drinking had completely improved. After 30 days of treatment, there was a reduction in mouth deviation, eye watering, and pricking pain in the eye. After 2 months, all symptoms were in remission. The same drugs were administered to *Doshas' Shaman* over the next four months. The patient was completely free of all symptoms; thus, the medication was discontinued.

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