

An Integrated Approach to *Ardita* With Special Reference to Bell's Palsy: A Case Study



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ABSTRACT: Bell's Palsy is the most common form of lower motor neuron type of facial palsy which is unilateral. This idiopathic condition has sudden onset which leads to one half of the facial weakness. The present case is on the effectiveness of *Ayurvedic* formulations with *Sthanik Snehana*, *Swedana*, *Nasya* and *Gandusha* and *Jivhapratisarana* procedures in Bell's Palsy. A 65 year old female patient visited in OPD with complaints of right sided mouth angle deviation, improper closure of eyes, right earache, giddiness since one day. She was diagnosed with Bell's Palsy. Bell's Palsy can be correlated with *Ardita* based on various clinical features. The patient was admitted in ward and managed with *Sthanik Snehana* (Localized oleation therapy), *Sthanik Swedana* (localized steam therapy), *Nasya karma* (Nasal administration of medications), *Jivhapratisarana* (massage of powdered drugs on tongue) and *Gandusha* (oil pulling in mouth) with oral *Ayurvedic* formulations. She got relief in all clinical features in 3 weeks. The collected data emphasize the potential of *Ayurved* interventions in *Ardita* (Bell's Palsy).

KEYWORDS: Bell's Palsy, Facial Palsy, *Ardita*, *Nasya*, *Gandusha*.

INTRODUCTION

Bell's Palsy is an idiopathic lower motor neuron disease. It is a facial paralysis which is characterized by sudden onset of complete or partial paralysis of unilateral facial muscles. Incidence of Bell's Palsy is 20 to 30 cases per 100,000 yearly^[1]. The recurrence rate is 8% to 12%.^[2] There is asymmetry of face, mouth angle deviation, drooping of eyelids, improper closure of eyes on affected side, while on attempting closure eyeball rolls upward which is known as Bell's phenomenon, difficulty in chewing, drooling of saliva, effacement of creases and skin fold on the affected sides, corneal ulceration may be seen in rare cases due to instability to close the eyes during sleep.^[3] Aetiology is not completely known. Herpes simplex virus and Herpes zoster are suspected. Pathologically there is oedema and swelling of the nerve occur within the facial canal, often at stylomastoid foramen. Diagnosis is made on clinical grounds. Approximately 80% of patients recovers within few weeks or months.^[4] Based on the clinical features described, this can be correlated with *Ardita*. *Ardita* is described as a *Vata Vyadhi* in one if the 80 *Nanatmaj Vatavyadhi*.^[5] In *Charaka Samhita Aacharya Charak* mentioned that symptoms are localized in the half of the face with or without the involvement of the body^[6], while in *Sushruta Samhita* it is described that only the face is involved^[7,8]. *Ardita* is also explained as *Ekayaam* by *Ashtang Hridaya Nidana* includes loud speaking, excessive laughter, exposure to extreme cold or wind, yawning, lifting heavy weight on head, sudden head and neck movement, children, old age emaciated patients etc. This causes vitiation of *Vata* and further leads to manifestation of *Ardita*. In *Charaka Samhita Brihana* therapy is indicated. *Nasya karma*, *Moordha tail*, *Tarpana Kriya*, *Nadiswed*, and *Upnaha swed* are described in the *chikitsa* sutra of *Ardita*.^[9]

CASE REPORT

A 65 year old female patient, presented in the OPD of Sane Guruji Arogya Kendra with complaining of right sided mouth angle deviation, improper closure of eyes, right earache and giddiness since one day. According to the patient she was absolutely normal before one day and suddenly had these complaints since one day, she didn't consulted anywhere and came to our hospital's OPD.

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She had no history of any comorbidities or any other medical illnesses like Diabetes mellitus, Hypertension. She was operated for Tubectomy 30 years ago. There was no history of any food or drug allergy. She is a tobacco chewer since last 5 years and no any family history regarding major illnesses. Her appetite was good and is vegetarian in dietary habits, her thirst was normal and bowel habits were regular.

CLINICAL FINDINGS

Ashtavidha Pariksha

Nadi – Vata-Pittaj

Mala – Samyak Malpravrutti

Mutra – Samyak mutrapravrutti

Jivha – Niraam

Shabda - Aspashtha (Mild Slurring)

Sparsha – Samshitoshna

Drika – Prakrut , Upnetram Nasti

Akriti – Madhyama

Patient had *Vata- Pittaj* dominance *Prakriti* with *Madyama Sara, Madyama Samhanana, Sama Pramana, Madyama Satmya, Madhyama Satva, Madhyama Vyayamshakti, Madhyama Aaharshakti* and *Madhyama Jaranshakti*.

On systemic examinations patient's pulse rate was 84/ min regular, blood pressure was 140 / 90 mmHg, respiratory rate was 18/min, temperature was 98.6 F and oxygen saturation was 98% on room air. No signs and symptoms of any systemic illness found during examination. Neurological examination as follows-

Neurological Examination:

Higher Motor Function: She was fully conscious and well- oriented to time , place, and person. Her recent memory and intelligence was intact. Hallucination and delusion were absent and mild slurred speech was present.

Cranial Nerve Examination

- Facial nerve:** There was loss of nasolabial fold on the left side, right sided mouth angle deviation during clenching of teeth and while puffing out cheeks and leakage of air from the left angle of mouth while filling of air in the mouth. On eye closure, the left eyeball move upwards and inwards when the patient attempted to close it along with incomplete closure of the eyelid. (Bell's Phenomenon Positive). Patient wasn't able to raise an eyebrow on left side. Taste perception was mildly affected.
- Trigeminal nerve:** Clenching of jaw deviated to right side.
- Optic nerve:** Pupils bilaterally equally reacting to light, round and regular. The fundus of both eyes was within normal limits.
- Trochlear nerve:** Corneal and conjunctival reflex was normal.
- Auditory nerve:** Rinnes test and Weber test were normal.

Muscle power and muscle tone in all four limbs were also normal and equal on both sides. Deep tendon reflexes were normal, plantar reflexes were normal. All the cerebellar signs were normal during the examination.

Lab investigations values:

Haematological investigations

Hb – 12

RBC – 3.94

WBC – 7400

PLT – 312000

MCV – 83

Neutrophils – 56.4%

Lymphocytes – 34.2%

Biochemical Values:

Blood urea level – 23.3

Sr. Creatinine – 0.92

Uric acid – 5.1

Serology – Negative

ECG – Normal sinus rhythm

Urine Analysis – Routine and microscopic WNL

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Treatment- Therapeutic Intervention And Assessment

The patient was given treatment for 3 weeks.

Sthanik Snehana was done with (*Mukha – Manya – Skandha*) *Bala Tailam*, then *Sthanik Swedana* at same place done with *Balaksheera*.

Nasya karma done with *Panchendriya vardhan tail* (4 drops in each Nostrils). *Jivha Pratisarana* done with *Akarkarabha Choorna*. *Gandush* with *Til tailam* was given.

Orally *Vatvidhwans Rasa* 2tabs TDS, *Ekgangavir Rasa* 2tabs TDS and *Jivhadi Kashaya* 4 TSF BD with equal quantity of water given. No complications occurred during and post treatment. The assessment was done on the basis of Trigeminal nerve, facial nerve examination and House-Brackmann facial nerve grading^[10].

Neurological examination before and after the treatment

Neurological examination	Before treatment	After treatment
Trigeminal nerve	Right sided mouth angle deviation	Markedly improved
Facial nerve	Incomplete closure of left eye	Complete closure of left eye
	Loss of nasolabial fold on left side	Markedly present
	Blowing of cheeks not proper	Proper blowing of cheeks without leakage
House- Brackmann facial nerve grading	4	1

DISCUSSION

The patient presented in the case was old aged female having no any co- morbidities, and she was clinically diagnosed as a patient of *Ardita*. In *Ardita* there is vitiation of *Vata* and *Dhatukshaya*. Hence *Brihana Chikitsa* is advised here which alleviates the *Vata Dosha* and provide nourishment to the *Dhatu*.

Sthanik Snehana on *Mukha, Manya* and *Skandha Pradesh* is done with *Bala Tailam* followed by *Sthanik Swedana* with *Bala Ksheera*. *Bala* is *Snigdha*, *Madhur, Balya* and *Tridoshanut* which balances *Vata Dosha*. This *poorvakarma* i.e. *Snehana, Swedana* before *Nasya* helps in elimination of vitiated *Doshas* and improving circulation. *Nasya Karma* done with *Panchendriya vardhan Tailam*, 4 drops in each nostrils. *Nasya*, medicated oil or powder is administered through the nostrils. In *Ashtng Hridaya* it is mentioned that "*Nasa Hi Shirasodwaram*"^[11]. Hence the drug which is administered through the nostrils goes to *Shringataka Marma* and spread throughout the *Murdha* (head), *Shrotra* (ear), *Netra* (eyes) via their *Siras* and eliminates the vitiated *Doshas* from the *Urdhwajatrugat Pradesh* and nourishes *Shira*^[12].

Panchendriya Vardhan Tailam contains *Bala, Brihati, Yashtimadhu, Draksha, Pippali, Jeevaka, Rishabhak, Meda, Vidanga, Sainadhav, Rasna* etc. *Panchendriya Vradhan Tailam* is described by *Acharya Kashyap* to improve power of all *Panchendriya, medha*, which mainly acts on central nervous system.^[13] The drugs present in this oil mostly have *Laghu, Snigdha Guna, Madhur Rasa, Madur Vipaka*, which helps to alleviates *Vata Dosha* and strengthens *Indriyas*. *Purvakarma* done before helps in facilitating drug absorption, elimination of *Dosha*, and improving circulation.^[14]

Snigdha Gandush done with *Til Tailam*. It has great *Vata hara* properties, *Mukhashodhan* is also done which strengthens the jaw muscles, has strength of speech and acts on nerves^[15]. *Jivhapratisarana* is done with *Akarkarbha Choorna*, it is a process in which medicated drug *Choorna* (powder) is applied on tongue and rubbed or massage gently. *Akarkarabha* is *Katu Rasatmak, Katu Vipaki, Ushna Virya* and having *Ruksha, Tikshna Gunas* which acts as *Kaphavata Shamaka*^[16]. It also works as *Nadi Uttejaka* (stimulates Nerves) and finely alleviates vitiated *Vata*.

Along with this orally *Vatvidhwans Rasa* was given to the patient. It is described in *Yogaratanakara*, most of the drugs are *Katu, Tikta Rasa, Ushna Virya*, giving *Vatakapha Shaman, Vatanulomana, Deepana* properties. *Ekgangaveer Rasa* also given which can pacify vitiated *Vata Dosha* due to its *Madhura Rasa, Snigdha Guna, Ushna Virya* and *Madhura Vipaka*. It pacifies vitiated *Kapha Dosha* by *Tikta, Katu, Kashaya Rasa, Laghu Ruksha Guna, Ushna Virya*. *Ekgangaveer Rasa* also eliminates *Strotorodha*, due to *Ama* and *Kapha* and minimizes nerve damage. Due to its anti-inflammatory, antioxidant properties oxidative stress is also relieved. Ingredients in the *Jivhadi Kashaya* helps to pacify vitiated *Vata* and acts on the central nervous system thereby relieving the symptoms.

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CONCLUSION

Based on the results, this case study shows that Bell's Palsy (*Ardita*) was managed with *Ayurvedic* medications and *Panchakarma* procedures with satisfactory outcome as significant effect on the patient. The results in this case observed are encouraging, and further clinical trials may be carried out for the management of Bell's Palsy (*Ardita*).

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