



An Ayurvedic approach in the management of Ardita vis-a-vis BELL'S PALSY – A CASE REPORT

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ABSTRACT:

Bell's palsy, an acute idiopathic lower motor neuron facial paralysis, is characterized by sudden onset paralysis or weakness of the muscles to one side of the face controlled by the facial nerve. In contemporary science, administration of steroids is the treatment of choice for facial palsy. Panchakarma procedures and internal Ayurvedic medicines have been proved to be beneficial in the management of Ardita vata (Bell's Palsy). A case of 23-year-old male patient diagnosed as Ardita vata was treated with various Panchakarma procedures like Nasya, Panasa Patra Swedana, Ksheera Dhooma, and Shamanaushadhis. Criteria of assessment was based on the scoring of House-Brackmann Facial Nerve Grading scale. After completion of Ayurveda treatment, the patient shown almost 70% recovery without any adverse effects. 30% of people do not fully recover and develop chronic facial asymmetry, facial tightness, Synkinesis, and other symptoms of chronic Bell's Palsy. This case is an evidence to demonstrate the effectiveness of Ayurveda treatment in case of Ardita vata (Residual Bell's palsy).

Keywords: Bell's palsy, Nasya, , Panasa Patra Swedana, Ksheera Dhooma, Shamanaushadhi's Ardita Vata

INTRODUCTION:

Bell's palsy, an idiopathic facial paralysis, is defined as an acute-onset, isolated, unilateral, lower motor neurone facial weakness.¹ It is associated with the presence of herpes simplex virus type 1 DNA in endoneurial fluid and posterior articular muscle. The annual incidence of this idiopathic disorder is between 11 and 40 per 100,000 annually, or about 1 in 60 person in a life time.² The early effect of Bell's palsy is inability to fully close the mouth and eye on the affected side of the face, causing difficulties in eating and speaking, corneal drying and erosion. Later 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.³ The subsequent disability of oral fitness, verbal correspondence, and social connection can add to critical significant emotional distress during Bell's palsy. 30% of people do not fully recover and develop chronic facial asymmetry, facial tightness, Synkinesis, and other symptoms of chronic Bell's Palsy.⁴ In Ayurveda, the treatment principle of Ardita disease mainly includes Navana (Nasya) (nasal administration of fatty substance like herbal medicated oil/ghee), Moordhni Taila (different modalities of retaining herbal medicated oil over the head for 30 to 60 minutes), Tarpana Chikitsa (retaining of herbal medicated oil over the eyes for few minutes), Nadi Swedana (fomentations with the help of tubular structures), Upanaha (poultice) with Anoopamamsa (meat of animals residing in Marshy land) is the line of treatment mentioned for Ardita.⁵

CASE REPORT:

A 23 years old male visited to Kayachikitsa OPD of JSS Ayurveda Medica College with the complaints of deviated angle of mouth towards right side, incomplete closure of left eyelid and difficulty in chewing food in left side since 1 year.

HISTORY OF PRESENT ILLNESS:

As per the statement of the patient he was apparently normal 1 year ago, suddenly one fine day after getting up from nap at noon he felt difficulty in complete closure of the left eyelid and difficulty in doing movements of the face, later on the same day patient's relatives noticed patient had deviation of mouth towards right side for which he was taken to near by Allopathic hospital and there he was diagnosed with Bell's Palsy and he was treated conservatively for 1 week and got 40% relief from the symptoms later on the condition did not get any better so for the residual symptoms like deviation of mouth, incomplete closure of left eyelid and difficulty in chewing food in left side of the face patient approached our hospital for better management.

HISTORY OF PAST ILLNESS:

H/o continuous swimming for 3 hours daily for 10 days, h/o travelling and exposed to cold breeze
No H/o unconsciousness, headache, giddiness or any infection before the onset of symptoms

PERSONAL HISTORY:

Appetite- reduced Thirst – reduced
Dietary habit – Non- vegetarian
Micturition – 3 to 4 times per day once @ night
Bowel – Once a day
Sleep – Sound Sleep.
Addiction – not any.

GENERAL EXAMINATION:

BP- 110/80 mm of hg
Pulse- 78/min
Temperature – Afebrile
R/R – 18/min
Blood Pressure-130/80mmhg
Pallor – Absent
Icterus – Absent
Cyanosis -Absent
Clubbing- Absent
Koilonychia- Absent
Oedema- Absent

SYSTEMIC EXAMINATION:**RESPIRATORY SYSTEM.:**

NVBS Heard, No added Sound

CARDIO VASCULAR SYSTEM:

S1 S2 Heard, No Murmurs

GASTRO INTESTINAL TRACT:

Soft and non tender, No organomegaly

MUSCULOSKELETAL SYSTEM:

All Range of movements are possible without pain

NERVOUS SYSTEM EXAMINATION:

Patient was conscious & well oriented to time, place & person.

Higher Mental functions like intelligence, memory, behaviour, emotions are normal. Speech was slurred.

All the deep reflexes such as biceps, triceps, brachioradialis, knee jerk, ankle jerk, plantar reflex are normal.

Muscle tone & power are normal in all the limbs.

CRANIAL NERVE EXAMINATION:**OLFACTORY NERVE- Table no.1**

Sense of smell – Intact
Appreciate and Identify Smell -Intact

OPTIC NERVE- Table no.2

Pupillary Reflex- Normal
Direct light reflex -Normal
Accommodation reflex- Normal
Visual Field -Intact
Myopia -Absent, Hypermetropia-Absent, Colour Blindness-Absent
Visual Acuity- Intact

OCCULOMOTOR, TROCHLEAR&ABDUCENT NERVE-Table no.3

Position of eyeballs at rest	Normal
Binocular movements	Normal
Pupil	Normal
Size	Normal
Shape	Normal
Reaction	Normal
Direct light reflex	Normal
Consensual light reflex	Normal
Squint/Diplopia/Nystagmus/Ptois- Absent	

TRIGEMINAL NERVE – Table no.4

	Right	Left
Touch Sensation over face (jawline, cheek, forehead)	Normal	Normal
Pain Sensation over face (jawline, cheek, forehead)	Normal	Normal
Temperature Sensation over face (jawline, cheek, forehead)	Normal	Normal

Mastication	Normal
Jaw movements	Normal
Open mouth against resistance	Normal
Clenching teeth	Normal

FACIAL NERVE EXAMINATION:

- Loss of facial symmetry.
- Diminished frowning on left side of face.
- Incomplete closure of left eyeeyelid.
- Dribbling of Salaiva-Absent
- Difficulty in rising eyebrows on left side.
- Difficulty in complete closure of left eyelid.
- Unable to blow cheek on left side.
- Absence of naso labial fold on left side.
- Bells Phenomenon -Present on Left side
- Deviation of the Mouth-Towards Right side
- Taste sensation -Alterd

AUDITORY / VESTIBULO -COCHLEAR NERVE- Table no.5

Hearing	Intact
Rhinne's test	Normal
Weber's test	Normal
Vertigo	Absent
Nausea, vomiting	Absent
Doll's eye oculoccephalic reflex	Absent

GLOSSOPHARYNGEAL &VAGUS NERVE – Table no.6

Position of Uvula	Centrally placed
Movement of Uvula	Centrally placed
Dysphagia	Absent
Gag reflex	Absent
Taste sensation of posterior 1/3 rd of tongue	Present

SPINAL ACCESSORY NERVE – Table no.7

	Right	Left
Shrugging of Shoulders	Possible	Possible
Assessment of bulk of SCM muscle	Normal	Normal
Movements of Neck	Possible	Possible

HYPOGLOSSAL NERVE -

- Tongue - Normal
- Speech- Slurred speech -Present

NIDANA OF ARDITA:

Acharya Charaka has not mentioned specific Nidana for Ardita. Nidana of Vatavyadhi can be taken as Nidana of Ardita.⁷

Acharya Sushruta specifically mentioned that Garbhini (pregnant women), Sutika (puerperium), Bala (young), Vriddha (old), Ksheena (emaciated) and Aasrika Kshayayukta (who have lost blood) are more prone to Ardita. Other causative factors of Ardita are Uchchaivyaaharata (shouting excessively), Atihasanam (Excessive laughing), Atijrumbhana (excessive yawning), Bharavahana (carrying heavy load), Kathina Bhakshana (eating hard substances), Vishama Shayasan (sleeping on uneven bed).⁸

Acharya Vagbhata has mentioned Nidana as Shirasobharaharanam (carrying heavy load on head), Atihasya, AtiPrabhasanam Uttrasvaktra Kshavathu, KharaKarmuka Karshanam, Vishama Upadhanata (use of irregular pillow while sleeping), Kathina Charvanat (chewing very hard substances) etc.⁹

PURVARUPA OF ARDITA:

Sushruta has explained Purvarupa of Ardita as follows: Romaharsha (horripilation), Vepathu (tremors), Netra Aavilata (muddy eyes), Vayu Urdhvagatitva (vitiated vayu moving in upward direction), TvachaSupti (numbness in skin), Toda (pricking pain in the affected parts), Hanugraha (lockjaw). Vangasen, Harita, Yoga Ratnakara also gave the same prodromal symptoms.¹⁰

SAMPRAPATHI:

Nidana (excessive continuous swimming, Travelling and exposure to cold breeze)

↓
Vata and Kapha prakopa

↓
Sthanasamshraya of Prakupita vata along with Kapha in Sandhi of Shira, Nasa, Hanu, Lalata and Netra.

↓
Snayu and Kandara are affected by the aggravated Doshas

↓
ARDITA VATA.

SAMPRAPATHI GHATAKAS:

- DOSHA: Prana, udana, vyana vata
- DUSHYAS: rakta, medas
- SROTAS: medovaha, raktavaha, samjnavaha
- SROTODUSHTI: sanga, vimargagamana
- UDBHAVA STHAANA: pakwashaya
- ADISHTAANA: Siras, indriyas
- SANCHARA STHAANA: Rasayani
- VYAKTHA STHAANA: Mukhaardha,
- ROGA MARGA: Madhyama

LAKSHANA

(Tabel no.8- Corelating Lakshanas with Cranial Nerves)¹⁰

LAKSHANAS	CRANIAL NERVE INVOLVED
Deviation of half of the face, nose, eyebrow, fore head and chin, escape of food and fluids from the angle of the mouth, incomplete closure of the eye (vakrekarothi vaktrardham naasa broo)	Facial nerve
Difficulty in hearing and pain in the ear (bhadhyethe sravanou)	Auditory nerve

Feeble Speech, hoarseness of voice, difficulty in swallowing (deena vaak,vaktram bhojanam vrajathi)	Glossopharyngeal and vagus nerve
Defects in vision due to drooping of eyelids (nethradeenam vaikrutham)	Optic nerve
fixed gaze (sthabda nethratha)	Oculomotor, trochlear, Abducent
Loss of sensation of face, pain in eye,ear,cheeks,jaw	Trigeminal nerve
Weakness of neck (greevapavarthanam)	Accessory nerve
Slurred speech (avyaktha bhashina)	Hypoglossal nerve

ASSESSMENT CRITERIA:

Assessment of the symptoms was done by using House-Brackmann Facial Nerve Grading Scale.¹¹
Assessment was done before treatment and after completion of treatment

INTERVENTION: -17-05-2023 to 24-05-2023 -for 7 days.

Table no.9

SL.NO	PROCEDURE	MEDICINE	DAYS
1	NASYA KARMA	Dhanwantaram 101 taila (8drops to each Nostril)	7
2	KSHEERA DHOOMA	Mukha Abhyanga with Ksheerabala Taila followed by Ksheera Dhooma followed by Jihwa Nirlekhana with Vacha and Honey	7
3	PANASA PATRA SWEDA	Ksheera bala taila Mukha Abhyanga followed by Panasa Patra Sweda	7

ORAL MEDICATION

Table no.10

1.	Dhanvantaram 101 Nasal drops	2drops -0-2 drops	15days
2.	Tablet Palsinuron	(1-1-1) Afternoon	15 days.

OBSERVATIONS AND RESULTS**OBSERVATIONS:**

Subjective parameters: Table no.11

Parameter	Before Treatment	After Treatment
Deviation of mouth towards right side	Grade IV	Grade II
Nasolabial fold	Loss from left side of mouth	Normal
Slurred speech	Mild difficulty in pronouncing	Normal speech
Chewing	Difficulty in chewing from left side	Easily chew from left side
Taste sensation	Altered	Normal

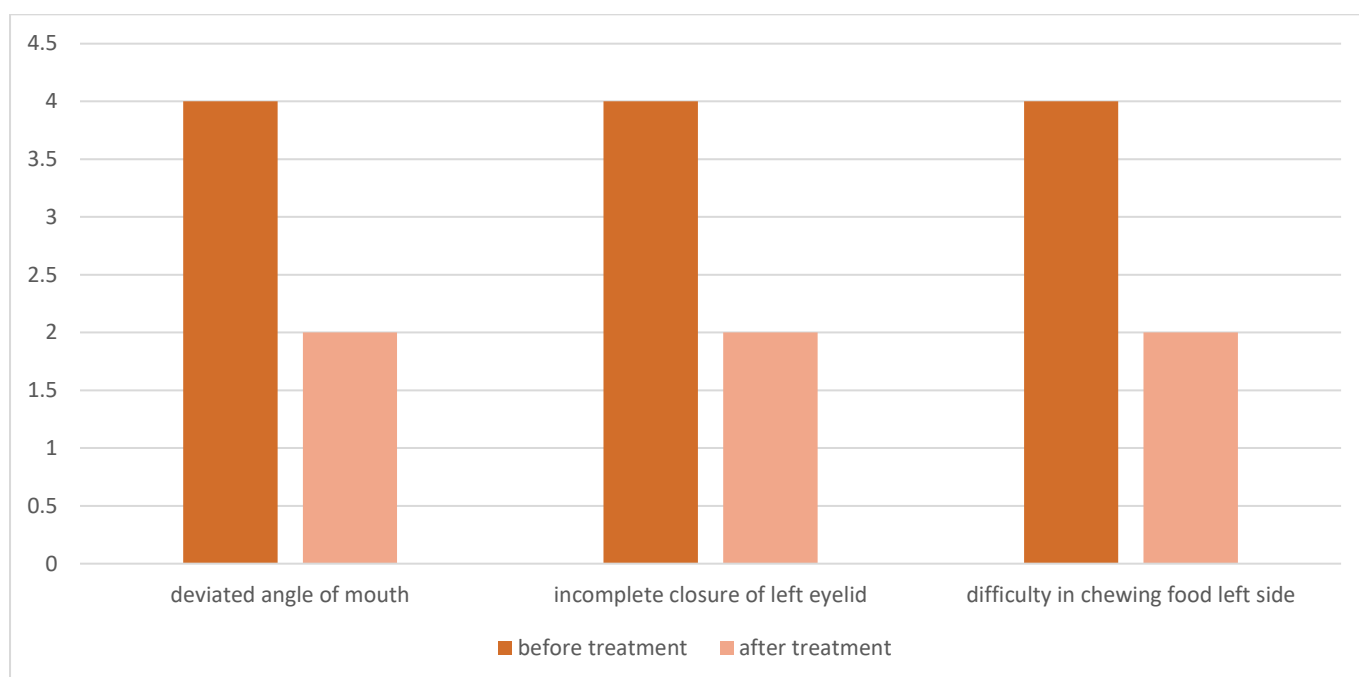
House-Brackmann Facial Nerve Grading Scale. ¹¹**Table no.12**

	Before Treatment	After Treatment
Left side of face	Grade IV (weakness with asymmetry of mouth, forehead frowning-none, incomplete closure of eyes with efforts)	Grade II (slight weakness noticeable on close observation, normal symmetry at rest, forehead-moderate to good function, eye- complete closure with minimum effort, mouth-

RESULTS:

After 7 days of therapy with internal medication, he got significant relief in complaints like Numbness on left side of face, correction of facial symmetry, no difficulty in speaking. Clinical assessments were made from the subjective symptoms & House-Brackmann's grading of facial nerve VII. The result were seen after 7 days of treatment.

BEFORE TREATMENT - HOUSEMAN BRACKMANN GRADING WITH - IV**AFTER TREATMENT - HOUSEMAN BRACKMANN GRADING WITH - II**



DISCUSSION:

Acharya Charaka described Nasa as “**NASA HI SHIRASO DWARAM**” the “Gateway” to Shira.¹² The drug given through the nose as Nasya enters the deeper tissues of the brain and pacifies Doshas responsible for the disease. The drug administered in Nasya is mainly Sneha (oil). Sneha is considered to be the best Vatashamaka. Viscosity of Sneha increases the absorption of the drug by increasing the contact time to the nasal mucosa and lipophilic drugs have better absorptive capacity (Transcellular passive diffusion).¹³ Nasya drug acts on Shringataka Marma which is a congruence of the nerve fibres for smell, taste, speech, vision and hearing sensation.¹⁴

Nasya karma with Dhanwantaram 101 avarthita taila suppresses nerve inflammation and promotes nerve regeneration and gives strength to muscles due to Balya and Brimhana properties of drugs present in it.

Panasa patra sweda relieves sheeta guna of vata dosha & it as balaya, bhrumhana, mamsala & santarpana properties given strength to facial muscles¹⁵. Panasa Patra has beta-sitosterol as an active principle. It is a steroid & precursor of an anabolic steroid boldenone. The probable topical absorption of beta-sitosterol in lipid base can be substantiated by the pharmacokinetics of boldenone.¹⁶

Ksheera Dhooma is a type of Snigdha Sweda. Abhyanga followed by Snigdha Sweda in the form of Ksheera Dhooma relieves stabdata by ushna guna, Rukshata by Snigdha Guna, Sthanika Srotovikasana by ushna guna mrudutwa and balya properties produced by of mixture of balamoola kwatha and ksheera. This leads to akshinimeshana karma. Muscle tissue – Rise in temperature induces muscle relaxation and increases the efficiency of muscle action, as the increased blood supply ensures the optimum conditions for muscle contraction. The most important temperature sensors involved in the regulation of temperature and sweat are heat sensitive neurons in the anterior region of Hypothalamus. These neurons respond to change in the temperature of the blood circulating through this organ. A change of only 0.010 c in the temperature of the blood circulating through the hypothalamus has been shown to stimulate the thermoregulating mechanism for the necessary adaptive measures. It can be inferred that the ushna guna of swedana karma leads to stimulation of sympathetic nervous system and there is vasodilation. Ushna guna also increases the Rasa and Rakta in the body.¹⁷

Tablet Palsinuron contains ingredients like Mahavata vidhwamsakasaka, Sammerapannaga Rasa, Ekangaveerasa, Sootashekararasa and acts as Vatashamaka, Balya and improves metabolic processes in CNS and PNS, activates neuro-muscular communication, and also stimulates cerebro-neural activity.¹⁸

CONCLUSION:

The features of Ardita as per Ayurveda in modern parlance suggest the involvement of 7th cranial nerve as one or the other feature of their damage is present as a lakshana in Ardita. The facial nerve is very obvious as it manifests with more number of symptoms than any other cranial nerve. This is the reason why the Ardita is frequently compared to facial nerve palsy even though unilateral involvement of all the cranial nerves is seen. In the present case Nasya with Dhanvantaram 101 Taila, Panasapatra swedana and ksheera dhooma followed by Dhanvantaram 101 Nasal drops (2drops -0-2 drops) Pratimarsha and Tablet Palsinuron for 15 days are highly effective in the treatment of Residual Bell's palsy (Ardita Vata) with almost 90% recovery.

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