



Case Study

AYURVEDIC MANAGEMENT OF *ARDITA* (BELL'S PALSY): A CASE STUDY

Shikha^{1*}, Rani Priyanka², Rao Renu³, Kumar Mohan⁴

¹P.G. Scholar, ²Assistant Professor, ³Associate Professor, P.G. Department of Shalaky Tantra, Rishikul Campus, Haridwar, Uttarakhand Ayurved University, Dehradun, Uttarakhand, India.

⁴P.G. Scholar, P.G. Department of Shalya Tantra, Rishikul Campus, Haridwar, Uttarakhand Ayurved University, Dehradun, Uttarakhand, India.

ABSTRACT

Ardita is considered as one among the *Vata Nanatmaja Vyadhis* described in our Ayurvedic classics. It can be correlated with the disease 'Bell's Palsy' in modern aspects. The present study was conducted with an objective to find out the effective *Ayurvedic* management in Bell's palsy. For present study, a 28 years old Hindu male having history of watering from right eye, difficulty in closing right eye, difficulty in moving up right eyebrow, difficulty in moving up right eyebrow with uneven frequency since last 5 years was registered in our OPD. History and examinations lead to the diagnosis of idiopathic facial nerve paralysis i.e. Bell's palsy. Considering the signs and symptoms patient was treated on the lines of *Ardita Chikitsa*. *Nasya Chikitsa* with *Bala Bilva Ghrita*, *Tarpana* with *Jeevanti Ghrita*, *Karnapoorana* with *Ksheer- Bala Taila* were done along with oral drugs and exercise. 100% relief was found in watering from eyes, slurring of speech, dribbling of saliva from right corner of mouth (*Lalasarava*), earache (*Karnashool*). 75% relief was found in trapping of food between gums and cheek. 50% relief was found in widening of palpebral aperture (*Netra Vikriti*), absence of Nasolabial fold and in smiling sign. Before starting the treatment the House Brackmann's grading of facial nerve was Grade 4 and after commencement of 28 days treatment it was Grade 2. There was no side effect observed during and after the treatment.

KEYWORDS: *Ardita*, Bell's palsy, *Nasya*, *Tarpana*, *Karnapoorana*.

INTRODUCTION

Ardita is considered as one among the *Vata Nanatmaja Vyadhis* described by *Acharya Charaka*^[1]. When *Vata* is functionally normal in the body, it is responsible for stimulation of all senseorgans^[2] but when it is in abnormal state in the body; it can cause morbidity and mortality^[3]. Etiological factors for this particular disease wherein *Vata* is viated primarily; are described in Ayurvedic texts as-transferring heavy weight on head, excessive laughing, loudly talking, sudden fearing, sleeping on uneven bed, eating hard food particles etc.^[4] Clinical features according to Ayurvedic classics are half sided facial deformity including nose, eyebrows, forehead, eyes, tongue and chin regions on affected side, slurring of speech, trapping of food particles between gums and cheeks, deafness^[5], partial closure of eyes^[6], disturbed smell sensation, pain in supraclavicular part of body^[7]. On the basis of these clinical features, this disease has similarities with the disease entity: Bell's palsy. Bell's palsy is an acute, idiopathic, commonly unilateral Lower motor neuron type of facial nerve involvement due to non- supportive inflammation of nerve within the facial canal above the Stylomastoid foramen^[8]. Bell's palsy has an incidence of 23 cases per 100,000 population/year, or about 1 in 60 to 70 people in a lifetime^[9]. The facial nerves control a number of functions, such as blinking and closing the eyes, smiling, frowning, lacrimation, salivation, flaring nostrils and raising eyebrows, sensation of taste in the anterior 2/3 of the tongue which are affected in Bell's palsy^[10].

Medical treatment for Bell's palsy include corticosteroid therapy, Antiviral agents^[11], topical ocular lubricants^[12] whereas surgical treatment include facial nerve decompression, subocularis oculi fat lift, tarsorrhaphy etc. Prognostically, patients fall into three groups; group 1 with complete recovery of facial motor function without sequelae, group 2 with incomplete recovery of facial motor function, but with no cosmetic defect that are apparent to the untrained eye and group 3 with permanent neurologic sequelae that are cosmetically and clinically apparent. Approximately 80-90% of patients recover without noticeable disfigurement within 6 weeks to 3 months^[13]. The recurrence rate of Bell's palsy is 4-14%^[14]. Treatment available in Ayurvedic text are *Nasya* (instilling medicated oil through nostrils), *Murdha tail* (oleation of head), *Santarpana Ahara* (Diet increasing strength and weight), *Nadisweda* (Sudation), *Upnaha* (Bandaging)^[15], *Mastishkya Shirobasti* (pouring of medicated drugs on head), *Dhooma* (Medicated smoke to the desired area), *Snehana* (Oleation), *Ksheer Taila* (*Pana* and *Abhyanga*)^[16], *Shrota-Akshi Tarpana* (instilling medicated oil/ghee into ears and eyes) and purification procedures^[17]. Keeping all these efficacious treatment modalities in mind, the present case study was carried out to evaluate the effect of classical *Ayurvedic* methods and procedures in the management of *Ardita*/Bell's palsy.

MATERIAL AND METHOD

AIM AND OBJECTIVE: To evaluate the effect of Ayurvedic treatment in *Ardita* (Bell's Palsy).

Case Report

A 28 years old Hindu male having history of watering from right eye, difficulty in proper closing of right eye specially while sleeping, difficulty in moving up right eyebrow, difficulty in chewing food due to trapping of food particles between gums and teeth, heaviness in right ear; since 6 years was registered. According to the patient he was asymptomatic 6 years ago. Then one day suddenly he noticed that his face was twisted more towards left side and he was unable to close his right eye completely. There was dribbling of saliva from right angle of mouth with mild slurred speech. He also experienced difficulty in eating from right side of teeth due to food particles trapping, that's why he started eating from left side. He took treatment from various hospitals for 4 years continuously but did not get satisfactory relief and stopped taking treatment hopelessly. Then after 2 years he got registered in the present study for further management. Patient had no previous/family history of Hypertension or Diabetes mellitus.

On examining clinically these findings were noted

On general examination: body weight, heart rate, respiratory rate, temperature, blood pressure, CVS, RS, CNS, blood investigations all were within normal limits.

Ear examinations revealed normal external auditory canal and tympanic membrane. Hearing was also normal in both ear. On examining nose, right side nasolabial fold was found less demarked in comparison to left side(fig-1).Taste sensation for anterior 2/3of tongue was found normal. Mild slurred speech was also present. Food collection on right vestibule was present when patient was asked to eat food article. Reflex movement for smile was found abnormal (fig-2). On examining forehead - furrow and wrinkling was absent on frowning on right side. Palpebral aperture of right eye was wider as compare to left. Partial eye closure and slow blinking was present in right eye. Cornea of both eyes were normal in sheen and transparency. Anterior chamber of both eyes were normal. Iris were normal in both eyes. Pupil of both eyes were normal in size, shape and reaction to light. Fundus of both eyes were within normal limits. Distant visual acuity and near vision acuity were 6/6 and N-6 respectively in both eyes.

As per the principles of *Ardita Chikitsa* described in Ayurvedic classics, patient was treated with *Nasya Karma, Tarpana Karma, Karna Poorana* and *Murdha Taila* along with oral drugs and exercise. (Table-2)

ASSESSMENT OF CRITERIA: Assessment was done on the basis of gradation system. (Table-1)

RESULT AND DISCUSSION

After 28 days of therapy 100% relief was found in watering from right eye, slurring of speech, dribbling of saliva from right corner of mouth (*Lalavrava*), earache

(*Karnshoola*). 75% relief was found in trapping of food between gums and cheek whereas 50% relief was found in widening of right palpebral aperture (*Netra Vikriti*), absence of Nasolabial fold and in smiling sign. On overall assessment it was found that House Brackmann grading of facial nerve function score was Grade 2 after completing the treatment which was Grade 4 before starting the treatment. There was no side effect observed during the treatment.

Probable Mode of Action of Therapy

Snehana Karma with *Ksheerbala Taila* nourishes the *Shleshaka Kapha* stimulate the sensory nerve endings and provide strength to the facial muscles.^[18] *Swedana* before the *Nasya, Tarpana* and *Karnpooran* enhance local microcirculation by dilation of blood vessels and increasing blood flow to the peripheral arterioles which accelerates the drug absorption and fast improvement. It also stimulates the local nerves.^[19]

Nasya is a process by which medicated oil is administered through the nostrils. The *Nasya Dravya* medicine reaches to *Sringataka Marma* from where it spreads into various *Strotas* (vessels and nerves) and alleviates the vitiated *Dosha*.^[20] *Nasya* provides nourishment to the nervous system by neural, diffusion and vascular pathway.^[21] *Tarpana* provides nourishment and strength to the eye.^[22] It also helps in watering from eyes^[23]. *Karna Purana* nourishes and stimulates the nerve endings. It pacifies pain in ear and also improve the hearing quality^[24]. *Moordha Taila* when applied on the head, produces clarity of the sense organs, confers strength to the voice, lower jaw and head. It serves to rejuvenate the body and eliminate mental exhaustion^[25]. It relaxes mind, stimulates nerves and sense organs. It controls vitiated *Dosha* in the head.^[26]

Ekangaveera Rasa used orally act as *Brinhana, Rasayana, Vishaghna* which helps in enhancing the speed of recovery in the patients of *Ardita*^[27] Other drugs like *Ashwagandha* and *Guduchi* are also having *Rasayana* properties^[28-29], which are helpful in rejuvenation of all *Dhatus* in the body. Exercise with balloon causes nerve stimulation and releases the compression of nerve.^[30]

CONCLUSION

From the present case study it can be concluded that Ayurvedic management described in classical texts is helpful in giving significant relief in symptoms and signs of the disease Bell's palsy, thereby improving quality of day to day life of the sufferer. All therapies like- *Nasya, Tarpana, Karnapurana, Moordha Taila* as a combined treatment, pacify the vitiated *Vata* in the body and thus provide nourishment to the sense organs. Moreover the drugs used orally and exercise are having additional effect in relieving the symptoms and signs.

Table 1: Grading for Clinical Feature

Clinical feature	Grading		BT	AT	%Relief
Watering from right eye	No watering	0	2	0	100%
	Persistent but do not disturb routine work	1			
	Persistent disturb routine work	2			
	Constant watering	3			

Widening of palpebral aperture (Netravikriti)	No widening	0	2	1	50%
	Slightly wide (Whole cornea visible)	1			
	Moderately wide (cornea & 1/3 of upper sclera visible)	2			
	Severely wide (cornea & 1/2 of upper sclera visible)	3			
Absence of Nasolabial fold	Nasolabial fold present normally	0	2	1	50%
	Nasolabial fold seen while trying to speak	1			
	Nasolabial fold seen while attempting to smile	2			
	Nasolabial fold never seen	3			
Smiling sign	Absent smiling sign	0	2	1	50%
	Smiling sign present without upward movement of left angle of mouth	1			
	Smiling sign present with upward movement of left angle of mouth	2			
	Smiling sign present all the time	3			
Slurring of speech	Normal speech	0	2	0	100%
	Pronouncing with less efforts	1			
	Pronouncing with great efforts	2			
	Complete slurring	3			
Dribbling of saliva from right corner of mouth (Lalasarava)	Dribbling Absent	0	2	0	100%
	Intermittent Dribbling	1			
	Constant but mild dribbling	2			
	Constant and profuse dribbling	3			
Trapping of food between gum and cheeks	No trapping	0	3	1	75%
	Mild trapping (not noticeable)	1			
	Trapped but easily removable by tongue	2			
	Trapped and need manual removal	3			
Earache (Karnshool)	No earache	0	2	0	100%
	Intermittent earache	1			
	Persistent earache, do not disturb routine work	2			
	Persistent earache, disturb routine work	3			

Table 2: Treatment Given

	<i>Nasya</i>		<i>Tarpana</i>		<i>Karnpoorana</i>	
Deepana & Pachana	Trikatu Churna 3 grams twice a day for 7 days: prior to treatment					
Poorva Karma	<i>Snahana</i>	<i>Swedana</i>	<i>Snahana</i>	<i>Swedana</i>	<i>Snahana</i>	<i>Swedana</i>
	<i>Ksheer Bala Tail</i>	<i>Keerdhooma</i>	<i>Ksheer Bala Tail</i>	<i>Shashti-Shalika</i>	<i>Ksheer Bala Tail</i>	<i>Nadi Sweda with Dashmoola Kwatha</i>
Pradhana Karma	<i>Bala Bilva Ghrita</i> In two sittings (each sitting of 7 days therapy and 7 days gap)		<i>Jeevantyadi Ghrita</i> In two sittings (each sitting of 7 days therapy and 7 days gap)		<i>Ksheer Bala Taila</i> In two sittings (each sitting of 7 days therapy and 7 days gap)	
Pashchata Karma	<i>Doompana</i>		<i>Pata Sweda</i>		<i>Pata Sweda</i>	
Oral drugs	<i>Akaanga Vira rasa</i> - 125mg <i>Aswgandhachurna</i> - 3gm <i>Guduchichurna</i> - 3gm		twice a day with <i>Madhu</i>		all for total 28 days.	
Murdha Taila application	Application of gauze piece on head all for 28 days (medicated by <i>Ksheer- Bala Taila</i>)					
Exercise	Ballooning exercise					
Total Duration of Therapy	28 days		28 days		28 days	

REFERENCES

1. Yadavji Trikamji Acharya, Chakrapani Dutta, Ayurveda Deepika Charaka Samhita Sutra, 1st Ed, Varanasi, Choukumbha Surabharati Prakashan, 2000, 17/12, Pg.no. 99.
2. Shastri Pt. Kashinath and Chaturvedi Gorakhnath, Charaka Samhita with Vidyotini Hindi Commentary, reprint 2008, Varanasi, Chaukhamba Bharti Academy, Sutra Sthana - 12/7, pg. no.246.

3. Shastri Pt. Kashinath and Chaturvedi Gorakhnath, Charaka Samhita with Vidyotini Hindi Commentary, reprint 2008, Varanasi, Chaukhamba Bharti Academy Sutra Sthana – 12/8, pg. no.248.
4. Tripathi Bramhnanda, Astanga Hridaya of Acharya Vagabhatta, Varanasi, Chaukhambha Sanskrit Pratisthana, Nidana Sthana 15/32-35, Pg-no.541.
5. Shastri Pt. Kashinath and Chaturvedi Gorakhnath, Charaka Samhita with Vidyotini Hindi Commentary, reprint 2008, Varanasi, Chaukhamba Bharti Academy, Chikitsa Sthana – 28/40-42, pg.no. 783.
6. Shastri Kaviraja Ambikadatt, Sushruta Samhita, part 1, 11th edition, Varanasi, Chaukhamba Prakashan, 2009, Nidana Sthana 1/70-72, pg.no.303.
7. Tripathi Brahmanand, Ashtang Hridayam, Varanasi, Chukhambha Sanskrit Pratisthana, ChikitsaSathana 21/43, Pg.no.- 809.
8. M. Flint Beal, Stephen L. Hauser, Harrison's Internal Medicine, Trigeminal Neuralgia, Bell's Palsy, and Other Cranial Nerve Disorders, 17th edition, part 16, pg.no.2584.
9. M. Flint Beal, Stephen L. Hauser, Harrison's Internal Medicine, Trigeminal Neuralgia, Bell's Palsy, and Other Cranial Nerve Disorders, 17th edition, part 16, pg.no.2584.
10. M. Flint Beal, Stephen L. Hauser, Harrison's internal Medicine, Trigeminal Neuralgia, Bell's Palsy, and Other Cranial Nerve Disorders, 17th edition, part 16, pg.no.2584.
11. Gronseth GS, Paduga R. Evidence-Based Guideline update: Steroid and antivirals for Bell's Palsy: Report of the guideline development subcommittee of the American Academy of Neurology. Neurology 2012 Nov7.
12. Holland NJ, Weiner GM. Recent developments in Bell's palsy. BMJ.2004 Sep 4. 329(7465) pg.no. 553-7.
13. Bell's palsy –Facial Palsy UK available at www.facialpalsy.org.uk/causesanddiagnoses/bell's-palsy /https://patient.info/doctor/facial-nerve-palsy#ref-11.
14. Bell's palsy –Facial Palsy UK available at www.facialpalsy.org.uk/causesanddiagnoses/bell's-palsy/ https://patient.info/doctor/facial-nerve-palsy #ref-11.
15. Shastri Pt. Kashinath and Chaturvedi Gorakhnath, Charaka Samhita with Hindi Commentary, reprint 2008, Varanasi, Chaukhambha Bharti Academy, Chikitsa Sthana 28/99, pg.no.795.
16. Shastri Kaviraja Ambikadatt, Sushruta Samhita, part 1, 11th edition, Varanasi, Chaukhamba Prakashan Chikitsa Sthana 5/22, pg.no.43.
17. Tripathi Brahmanand, Ashtang Hridayam, Varanasi, Chukhambha Sanskrit Pratisthana. Chikitsa Sathana 21/43.
18. Shastri Pt Kashinath and Chaturvedi Gorakhnath, Charaka Samhita, reprint 2008,Varanasi, Chaukhambha Bharti Academy, Sutra Sthana chap 13/41-42, pg.no.267.
19. Shastri Pt.Kashinath and Chaturvedi Gorakhnath, Charaka Samhita, reprint 2008,Varanasi, Chaukhambha Bharti Academy, Sutra Sthana chap 14/2024, pg.no.286.
20. Tripathi Ravi Dutta, Astangsangrah, reprint 2005, Varanasi, Chaukhambha Sanskrita Pratisthana, sutra sthana chap 31/3, pg.no.528.
21. Health And Lifestyle Blog By Dr JV Hebbar B.A.M.S., M.D (Ayu), PGDPSM Oct28,2011, Available at easyayurveda.com/.. /anu-tail-a-good-ayurveda-oil-for-nasya-treatment.
22. Srivastava Dr. Smt. Shailja, Sharangdhar Samhita of Acharya Sharangdhar Jivanprada Hindi Commentary, Reprint Ed.2011, Varanasi, Chaukhambha Orientalia, Chp.13/32, P.N.486.
23. Gupta Kaviraja Atrideva, Astanga Hridayam; Vidyotini Hindi Commentary, Reprint 2009, Varanasi, Chaukhambha Prakashan, Sutra Sthana 24/1-3, pg.no.186-187.
24. Ayurtimes Karnpooran by Dr. Jagdev Singh, Nov 9, 2016. Available at www.ayurtimes.com/Karn-puran.
25. Nirogam- Murdha Tail (Anointing the head with oil) by Dr. Arati Verma, (Dandruff, General wellbeing, Massage, stress, therapy and relaxation technique), Nirogam.com/muedhani-tail-anointing.
26. Murdhatail: Ayurvedic oil treatment on head article by Dr. Raghuram Y.S. MD (Ayu), easyayurveda.com /2016/05105/moordhatail.
27. Ayurvedic Medicine Information By Dr JV Hebbar B.A.M.S., MD (Ayu), PGDPSM July10 2012. Available at http://ayurmedinfo.com/2012/07/10/ekangveer-ras-benefits-dosage-ingredients-side-effects.
28. Sharma PV, Dravyaguna Vijnana, Vol.-2. reprint 2013, Varanasi: Chaukhambha Bharti Academy; pg.no.763.
29. Sharma PV, Dravyaguna Vijnana, Vol.-2. reprint 2013, Varanasi: Chaukhambha Bharti Academy; pg.no.761.
30. Holland NJ, Weiner GM. Recent developments in Bell's palsy. BMJ.2004 Sep 4. 329(7465), pg.no.553-7.

Cite this article as:

Shikha, Rani Priyanka, Rao Renu, Kumar Mohan. Ayurvedic Management of Ardita (Bell's Palsy): A Case Study. International Journal of Ayurveda and Pharma Research. 2017;5(4):62-65.

Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**

Dr Shikha

P.G. Scholar,

P.G. Department of Shalakyta Tantra,

Rishikul Campus, Haridwar,

Uttarakhand Ayurved University,

Dehradun, Uttarakhand, India.

Email: shikha9801@gmail.com

Ph: 09454908322