



Case Report

Sadyovamana - An effective therapy in the management of Bell's palsy – A case report

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ABSTRACT

Bell's palsy or Facial nerve palsy is a condition that causes temporary weakness or paralysis of the muscles in the face. In Ayurveda, *Ardita* is a disease with functional disturbances affecting the *Uthamanga* (head) and stands close with the symptoms of Bell's palsy. This crippling disease has been elaborated by Ayurveda *Acharyas Charaka, Susrutha* and *Vagbhata* in their respective samhithas. It is narrated as one among the *Asheeti Vata Vikaras* (80 types of typical *vata* predominant diseases). This report is on a case study of 44 year old male patient who approached the *Panchakarma* OPD presenting with complaints of deviated face towards left side, difficulty in closing right eye and feeling of heaviness and swelling over right side of face for about 3 days. After relevant examinations and screening it was diagnosed as Bell's palsy. This disease though self-resolving some cases remain partially recovered and some may be left with major facial dysfunction. This patient was admitted at Govt. Ayurveda College, Tripunithura, Kerala, India for speedy recovery and complete resolution of this disease. Fourteen days of treatment primarily *Sadyovamana* followed with oral medications, *pratimarsha nasya* and physiotherapy were administered. The patient got complete recovery from all the symptoms of *Ardita* without any residual weakness or deformity within two weeks which is much early than the self-resolving period of 6 months. Being one among the *asetivatavikaras*, *Sadyovamana* is the least practiced treatment for this condition. So in this report the scope of *Sadyovamana* in Bell's palsy management is discussed.

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1. Introduction

Ardita is one among the 80 *vatajananatmajavyadhis*. In the explanation of the disease *Ardita* by *Acharya Charaka* its mentioned that the features are seen in one half of face, trunk, extremities or they may be restricted only to face and is episodic in nature [1]. *Acharya Susrutha* opines that *Ardita* involves one lateral of face only and is non-episodic in nature [2]. *Vridhha Vagbhata* specifies it as the manifestation in the half of face along with the involvement of half of the body [3]. So there exist certain differences in the explanation of disease manifestation between the *Brihaththrayees*. But when it comes to treatment *Acharya Charaka* and *Susrutha* treated *Ardita* as a *vata vyadhi*, whereas *Vagbhatacharya* has

recommended two principles of treatments based on the *dosha* involvement [4]. He has clearly stated that if associated with *sopha, vamana* must be done. And in case of *daha, siravyadha* is the management.

All the comments on *Ardita* by *Acharyas* seem to be scientific and relatable to the disease Bell's palsy mentioned in modern science. Bell's palsy or Facial nerve palsy is a condition that causes temporary weakness or paralysis of the muscles in the face. Acute facial palsy is thought to be due to viral infection causing swelling of nerve within the tight petrous bone of facial canal. It is a common cranial neuropathy causing acute unilateral lower motor neuron facial paralysis. Immune, infective and ischemic mechanisms are all potential contributors to the development of Bell's palsy, but the precise cause remains unclear [5]. It affects 11.5–53.3 per 100,000 individuals a year across different populations. Bell's palsy is a health issue causing concern and has an extremely negative effect on both patients and their families [6]. Although it usually resolves within 3 weeks–6 months [7], Bell's palsy may lead to severe

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temporary oral insufficiency and incapability to close the eyelids in some cases, resulting in potentially permanent eye injury. In approximately 25% of patients with Bell's palsy, moderate-to-severe facial asymmetry may persist, frequently impairing patients quality of life. These are among the long term consequences of Bell's palsy which can be devastating [8]. Therefore, diagnosis and prompt cause determination are key for early treatment. No effective treatment has been highlighted by the contemporary science for this crippling disease apart from symptomatic management. It is estimated that 4–7% of all cases of Bell's palsy have recurrent facial palsy [9].

This reported case serves as a novel evidence of the management of Bell's palsy with Sadyovamana, which is the least preferred therapy among Ayurvedic physicians.

2. Patient information

A 44 year old male patient approached the *Panchakarma* OPD with complaints of deviated face towards left side, difficulty in closing right eye and feeling of heaviness and swelling over right side of face for 3 days. Three days before his visit to the hospital, he noticed difficulty in holding water inside the mouth while brushing his teeth early in the morning. He ignored the same and proceeded towards his work place which lead to exposure to cold air. By evening he noticed difficulty in closing his right eye and felt deviation of mouth towards left side. He also felt a feeling of heaviness and swelling over right side of face. As the symptoms persisted up to the third day, he came to Panchakarma OPD at Government Ayurveda College, Tripunithura for consultation. After relevant examinations it was diagnosed as Bell's palsy. This disease though self-resolving some cases remain partially recovered and some may be left with major facial dysfunction. Hence he was advised to get admitted at Govt. Ayurveda College, Tripunithura, Kerala, India for speedy recovery and complete resolution of this disease. For ruling out other etiologies brain MRI was taken. There was no record of any co-morbidities, any surgical history or history of any allergy or past medication. Before ongoing the examination and procedure, the informed written consent was obtained from the patient.

3. Clinical findings

3.1. General examination

Pulse rate – 67/min, Heart rate – 70 beats/min, Respiratory rate – 16 breaths/min, Blood pressure – 130/80 mm Hg, Temperature – 98.6 °F.

3.2. Central nervous system examination

1. Higher Motor Functions - Intact
2. Consciousness- Conscious
3. Orientation to- time, place, person- Intact
4. Memory (Recent and Remote)- Intact
5. Intelligence- Intact
6. Hallucination and Delusion - Absent
7. Speech - Slow with mumbled words

3.3. Cranial nerve examinations

Neurological examination of all cranial nerves were performed and found intact except facial nerve. Cerebellar examinations were also within normal limits.

On Facial nerve examination:

- a. Forehead frowning - not possible on right side
- b. Eyebrow raising - not possible on right side
- c. Eye closure -incomplete closure of right eyelid (Bell's phenomenon)
- d. Clenching of teeth - mouth deviates to the left side
- e. Blowing of cheek - leaking of air from right side
- f. Nasolabial fold - loss on right side.
- g. Taste perception - not affected
- h. Dribbling of saliva and spilling of food from right angle of the mouth
- i. Bells phenomenon-present on right side
- j. Deviation of mouth - towards left side
 - Deep Reflexes such as Biceps, Triceps, Supinator, Knee jerk, Ankle jerk and plantar reflex were normal.
 - Muscle power and Muscle tone in all limbs were also normal.
 - Corneal reflex – Blink reflex was absent on right side.

3.4. Co-ordination

Upper limb.

- Dysdiadokinesia- Absent
- Finger nose test- Possible
- Pronator Drift- Possible
- Finemovements- No abnormality was detected

Lower limb.

- Tandem walking- Possible
- Heel shin test- Possible
- Heel walking -Possible

4. Timeline

Sl No	Complaints/Events	Duration/Date
1	Difficulty in closing right eye	17 Sep 2019
2	Deviation of mouth towards left side	17 Sep 2019
3	Feeling of heaviness and swelling over right side of face	17 Sep 2019
4	First OPD visit and Diagnosed as Bell's Palsy	20 Sep 2019
5	Admitted to hospital as inpatient	21 Sep 2019

5. Diagnostic assessment

After relevant examinations it was diagnosed as Bell's palsy.

MRI Brain was advised to be taken for excluding other possible causes of Bell's palsy. The report showed no abnormalities.

6. Therapeutic intervention

The comprehensive treatment was planned for the present case by clearly understanding the associated *kapha dosha* through his presentation of heaviness and swelling on right side of face. During interrogation we could trace certain food habits which included daily consumption of fish and curd together for 3 years which could be the possible *nidana* for this *roga*. Taking into consideration the disease pathology and challenges of performing *vamana* preceded by *shodhanartha snehapana*, here *Sadyovamana* was selected due to the acute nature of the disease. After *Sadyovamana* oral medications along with *Prathimarsha nasya* and physiotherapy was given [Tables 1 and 2](#).

Table 1

Details of the treatment algorithm like duration of treatment, drugs used, dosage, etc. have been enlisted.

1st, 2nd, 3rd day	<i>Sadyasneha with go ghritha 50 ml + peya</i>	two times a day
3rd day	<i>Sadyasneha + utkleshanaahara, sarvanga abhyanga and bashpa sweda</i>	
4th	<i>Vamana with yashtimadhukashaya</i>	
5th, 6th, 7th	<i>Peyadi krama</i>	3 days

7. Follow up and outcomes

Patient was hospitalized for 14 days. Symptoms like heaviness and swelling of face got relief soon after *Sadyovamana*. Whereas the other symptoms like closing of right eye and deviation got complete relief within 14 days of treatment. All the examinations were repeated and showed no abnormalities. On discharge the patient was educated regarding his condition and the chances of recurrence. He was advised to avoid the foods and activities which can cause the recurrence of the same and follow up every six months. It is estimated that 4–7% of all cases of Bell's palsy have recurrent facial palsy [9]. The patient is under follow up for almost three years with no recurrence.

8. Discussion

The general treatment principle explained for *kevalavatavyadhi* is *snehana*. But whenever there is an association of either *kapha* or *pitta* due to *avarana* or *samsarga* the treatment may shift to *vamana* or *virechana*. These two possibilities in *samprapthi* are evident when we analyze the treatment principle explained by different *acharyas*. According to *Acharya Susruta* the treatment for *Arditha* includes *Matishkyam, Shirovasti, Dhoomapana, Snehapana*. This may be suitable for a *kevalavatajanyarditha*. *Vagbhataacharya* explored the two possible *samprapthi* (*kevalavata* or *anyadoshaja* involvement) of *arditha*. And stated that whenever there is association of *sopha*, *vamana* may be done and when there is *daha, rakthamokshana* may be a treatment option [13].

Keeping all these efficacious treatment modalities in mind, a comprehensive treatment was planned for the present case. *Sadyovamana* is a rarely practiced treatment due to lack of proper understanding about the possibility of *kapha dosha* involvement in the *samprapthi* of this *roga*. Here for this case a treatment plan of 14 days primarily *Sadyovamana* followed with oral medications, *pratimarsha nasya* and physiotherapy were administered to this patient *Tables 1 and 2*. The patient got complete recovery from all the symptoms of *Arditha* without any residual weakness or deformity within two weeks which is much early than the self-resolving period of 6 months.

In *Ashtanga Sangraha*, *Vagbhataacharya* has mentioned the disease *Arditha* among the people who are contraindicated for *vamana* [12]. It is explained that if *vamana* is performed in a contraindicated person, it might cause increase of the disease and even death. It is difficult to see the *kapha* and *pitta* component in this *vatavyadhi*. Hence most physicians go along with the *vatavyadhi* protocol which is really contradictory if there is an association of *kapha* and *pitta*, whereas a proper management will ensure complete cure of the disease without recurrence.

Table 2Intervention through oral medicaments – Shamana chikitsa after *sadyovamana*.

1	<i>Dhanadhanayanadi kashaya</i> [10]	90 ml twice a day before food	7 days
2	Tab. <i>Dhanwantharam</i> [11]	1 tab twice a day with <i>kashaya</i>	7 days
3	<i>Pratimarshanasya</i>	with <i>Anutailam</i> [12]	7 days
4	Physiotherapy		

9. Patient perspective

The patient was satisfied with the treatment protocol and was really happy to see the reversal of symptoms within a short duration of two weeks. Now he has confidence to engage in normal routine work. The treatment helped him not only to cure but also to improve his quality of life and also prevent the recurrence of this disease. It was later after discharge he realized the seriousness of the disease and was thankful for the prompt treatment.

10. Conclusion

Sadyovamana is the least preferred treatment in the management of *Arditha* because it is not a self-administered procedure. But in this particular case we could clearly identify the *kapha dosha* involvement by heaviness of right side of face and in addition to that his eating habits and travelling with exposure to cold became the potential cause for *vata* and *kaphavidhi*. Thus performing *sadyovamana* became a very effective procedure. This case study is having encouraging results. By two weeks of treatment we could provide patient with complete cure and good quality of life. This patient has had no recurrence since three years. So this intervention highlights the need of exploration of association of *kapha* in the pathogenesis of *Arditha* and elimination of this *kapha* by introducing *Sadyovamana*.

Informed consent

Informed consent was taken from the patient for this study.

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Declaration of competing interest

None.

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