Case Study

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A CASE STUDY ON RESTORING FACIAL SYMMETRY: AN AYURVEDIC APPROACH TO ARDITA (BELL'S PALSY)

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ABSTRACT

The case study outlines the successful Ayurvedic management of Bell's palsy, referred to as Ardita in Ayurveda. The 46-year-old male patient presented with sudden onset drooping of the right upper eyelid, prominent right nasolabial fold, and dryness in the right eye after travelling. These symptoms are consistent with facial muscle weakness, which is characteristic of Bell's palsy. In Ayurveda, Ardita is correlated with the vitiation of Vata dosha, leading to facial distortion. The treatment approach adopted in this case was shamana chikitsa, a method focused on pacifying the aggravated dosha. Additionally, the Tarpana procedure, belonging to Netra-kriya-kalpana (ocular therapies), was employed along with mild ocular exercises. The shamana and Tarpana procedures were initiated from the first day of the treatment. After two weeks, there was a significant improvement in the gradation of Bell's palsy, resulting in a normal palpebral aperture of the eye. Notably, the treatment approach followed Ayurvedic principles and did not involve the use of oral steroids. This case study contributes to exploring and developing Ayurvedic treatment modalities for Bell's palsy. The successful outcome, without adverse effects, highlights the potential effectiveness of Ayurvedic interventions in managing facial muscle weakness. The emphasis on shamana and specific ocular therapies aligns with the holistic approach of Ayurveda, addressing the root cause of the condition and promoting overall well-being. In conclusion, this case study provides valuable insights into Ayurvedic management of Bell's palsy, showcasing the potential of traditional Ayurvedic principles and therapies in treating facial muscle weakness, enhancing confidence and preventing long-term facial damage.

Keywords: Ardita, Bell's palsy, Tarpana, ocular therapies, Steroids.

INTRODUCTION

Facial appearance significantly influences both our perceptions of others and our self-image. Conditions causing facial distortion, such as Ardita, can dramatically impact daily activities, social interactions, and overall well-being. In Ayurveda, Ardita is attributed to vitiated Vata dosha affecting the corresponding nerve, artery, or vein on one side of the face, leading to facial distortion. Bell's palsy, often characterised by idiopathic lower motor neuron lesions, affects individuals of all ages and genders and tends to resolve independently[1]. The annual incidence of Bell's palsy is 15 to 20 per 100,000, with 40,000 new cases each year, and the lifetime risk is 1 in 60.[2] Contemporary treatment options for Bell's palsy include oral steroids, NSAIDs for pain, antiviral medications (if herpes simplex virus is involved), eye care measures, and electrical stimulations. However, these methods can be costly and may pose hazardous side effects. With its focus on holistic healing, Ayurveda offers long-term benefits by addressing the root causes of the disease. In Ayurveda, Ardita is classified as one of the 80 nanatmaj Vata vikaras, indicating its association with Vata vitiation[3]. The causes include factors like excessive laughter, loud speech, chewing hard food, sneezing, yawning, crying, heavy headloads, sudden head and neck movements, prolonged exposure to cold wind, and improper sleep postures. These lead to Vata aggravation, affecting sira (veins), snayu (muscles), and sandhi (joints) of the exposed face, resulting in symptoms similar to Bell's palsy, like distortion of the ipsilateral face, inability to speak correctly, loss of hearing, improper mastication, head tremors, impairment in smell sensation with or without ocular pain.[4] Approximately 85% of Bell's palsy cases show improvement within 3 weeks, and the remaining 15% within 3-5 months. Overall, 71% of people will fully recover facial muscle function. The remaining 29% have mild to severe residual facial muscle weakness. [5] Ayurvedic treatments for Ardita, as prescribed by Charaka, include navana nasya, moordhni taila, tarpana, nadi sweda, upanaha, and anoopa mamsa sevana.[6] These modalities strengthen affected muscles, stimulate nerves, and improve blood circulation for a complete cure. This article underscores the importance of addressing Ardita, which is caused by prolonged exposure to cold wind and leads to vitiation of Vata, emphasising the need to balance Vata, Pitta, and Kapha doshas for overall health.[7] According to Charaka, balanced Vata sustains organ functions, promoting longevity.[8] He also identifies six factors that aggravate Vata, i.e., ruksha (dryness), laghu (lightness), sheeta (coldness), daruna (coarseness), khara (roughness), vishada (non-sliminess).[9] Akshi Tarpana chikitsa with Maha Triphala ghrita, a treatment belonging to Netra kriya Kalpana, it is possible to alleviate Vata through properties of snigdha (unctuousness), guru (heaviness), ushna (warm), shlakshna (smoothness), picchila (sliminess).[10]

MATERIAL AND METHODS

The intended course of treatment was;

- Vatvidhwansan Ras 125 mg twice daily with lukewarm water.

- Akshi Tarpan by Maha Triphala ghrita

Case report

On 10th May 2023, a 46-year-old male patient visited the OPD of Kayachikitsa department at Ayurved Mahavidyalaya, Sion, Mumbai, Maharashtra, India, with complaints of acute onset of the following symptoms for 3 days [Figures 1-3].

Complaints

1. Drooping of the right upper eyelid (Stabdha netram, Ekasya aksho nemeelinam)
2. Prominent Nasolabial fold on the ipsilateral side
3. Dryness in the right eye (Akshi shosha)
4. Mild pain in the right eye (Akshi shoola)

History

The patient experienced the above symptoms following prolonged exposure to cold wind for 6 to 8 hours during travel. He had no history of diabetes mellitus, hypertension, or head trauma. No comorbidities or addiction were reported. A thorough examination led to a diagnosis of Ardita (Bell's palsy). The patient was provided a detailed explanation of the disease with a planned line of treatment prior. The treatment plan consisted of Tarpana chikitsa (Netra kriya kalpana) with mild ocular exercises to strengthen, stimulate, and nourish localised nerves, arteries, veins and respective muscles. Details of the procedure are mentioned in Table 2. This treatment showed successful expected results in managing Ardita within 14 days. The patient was followed up every 7th day for 1st two visits, and then on the 30th day, the improvement is mentioned in Table 3.

Clinical findings

The patient had drooping of the right upper eyelid with dryness for 3 days. All the vitals were normal, and systemic examination revealed no abnormality.

Local examination: Corneal reflexes were present, the pupil was reactive to light, a blowout of the cheeks was present, and the prominent right nasolabial fold and the jaw jerk were regular. Palpebral fissure height – 2 mm

Physical examination
BP - 130/90 mm of hg
P - 86/min
General condition - Fair
Oxygen saturation - Normal
Temperature - Afebrile

Ashtavidha pariksha (Eightfold examination)
1. Nadi (pulse) - Kapha-Vata
2. Mala (stool) - Samyak (satisfactory passage of stool)
3. Mutra (urine) - Samyak (satisfactory urine output)
4. Jivha (tongue) - Niram (non-coated tongue)
5. Shabda (sounds) - Spashta (Clear)
6. Sparsha (touch) - Ishad ushna (afebrile)
7. Druk (vision) - Vision of the right eye was hampered mechanically due to drooping of the right upper eyelid.
8. Akruti (body frame) - Madhyam (Moderate)

Other examination
1. Prakriti (constitution) - Kapha vataj
2. Vikriti (imbalance) - Vata dosha
3. Saar - Mamsa
4. Samhanana (body compactness)- Madhyam
5. Satva (mental status) - Madhyam
6. Satmya (Adaptability) - Sarva ahar satmya
7. Aahar Shakti (digestive power) - Samyak
8. Vyayam Shakti (exercise capacity) - Madhyam
9. Desha (land) - Aanup (Wetland)
10. Kaala (period) - Visarga

Diagnostic finding: MRI of the brain (plain) revealed no abnormality.
The above symptoms were suggestive of Ardita vyaadhi.

Treatment plan

Table 1: Shamana chikitsa (Internal medicine)

Medicine	Dose	Anupan	Duration
Vatavidhwansan ras	125 mg (1-0-1)	Lukewarm water	For 14 days -after breakfast and after dinner

Table 2: External procedure

Procedure	Duration
Akshi tarpan [Figure 5] – by Maha Triphala ghrita [11,12] The patient was made to sleep supine with neck support if required. Masha (Black gram flour) with some water and oil was used to prepare the Netra tarpana ring, which was supposed to fit on the eye socket. The height of the ring was 2 angulas (approximately 1.75 cm). The junction of the flour ring should be sealed with the eye socket to prevent any leakage of the medicated ghee. The required quantity of ghee was taken in a small vessel and placed in a big vessel with hot water. The ghee was administered lukewarm. The ghee was filled in the ring to the height of the eyelashes, and the patient was asked to blink the eyes 100 times. (146 Sec) [13] The medicated ghee was removed by creating a hole in the ring's lower portion at the eye's outer angle. Later, the eye was washed with a sterile cotton dipped in lukewarm water. The patient was asked to protect the eye from direct sunlight and wind and to avoid seeing faraway objects.[14]	For 14 days daily The procedure was done at 9.30 am.

Ardita is considered to be Vata vyaadhi, where the aggravated Vata dosha resides in the nerves and muscles supplying the eyes and cheeks of the affected side. In this case, there is drooping of the right upper lid stating that it belongs to Vartmagata roga and as per Acharya Vagbhata Tarpana in Vartma-rogas is for 100 matra kala (146 Sec.).[15]

Table 3: Follow-up and Outcome

Follow up	Changes seen	
1st day (10th May 2023)	• The palpebral fissure height of the right eye was 2 mm (measure with the ruler between the upper lid and lower lid margin vertically from the centre of the cornea) • Unable to elevate the right upper lid. • Dryness of the right eye with mild pain • Prominent nasolabial fold on the right side	• The procedure of Tarpana started • Vatavidhwansan rasa 125 mg 1-0-1 started.
7th day (17th May 2023)	• Dryness in the right eye has reduced, but pain in the right eye remains. • Palpebral fissure height was 5 mm. • Able to lift the upper eyelid partially.	• Tarpana and Vatavidhwansan rasa continued.
14th day (24th May 2023) [Figure 4]	• Dryness in the right eye and right ocular pain are absent. • Palpebral fissure height was 9 mm. • Able to lift the upper eyelid completely. • Complete recovery was seen.	• The Tarpana procedure was stopped. • Vatavidhwansan rasa stopped.
30th day (9th June 2023)	• No recurrence of symptoms. • The patient was happy with the result.	

Figure: 1

Figure: 2

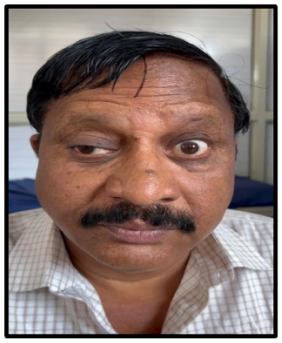

Figure: 3

Figure: 5

Figure: 4

RESULTS

In the case of Bell's palsy (Ardita), the patient experienced complete relief from symptoms through Ayurvedic treatment on the 14th day.

DISCUSSION

Bell's palsy is characterised by facial muscle paralysis and disruption in sensory or motor functions. Ardita occurs due to the vitiation of Vata dosha. Vata, considered the principal dosha, holds significance due to its unique properties, regulatory functions over other doshas, and susceptibility to causing various ailments. Its inherent sukshma guna allows it to permeate easily through the body's channels. It controls the regulation of the other two doshas' movements, as Sharangdharar stated.[16] The properties of Vata dosha, including ruksha (dry), laghu (light), sheeta (cool), khara (rough), sukshma (subtle), and chala (unsteady), contribute to the manifestation of diseases. Specifically, the sheeta guna can induce stambhana (rigidity), leading to sluggishness in the affected eye.[17]

According to Charaka, Vata dosha's role in "dosha samashoshan", which is elaborated in detail by Chakrapani as 'Sharira kleda samshoshana' involves water absorption in specific body parts.[18] In this context, the prolonged exposure to cold wind could have triggered the absorption of water in the eye, giving rise to the condition of Ardita.

The treatment approach employed focused on both internal and external interventions. Internal medication included Vatavidhwansan rasa, while external procedures involved Tarpana netra kriya kalpana. This combined therapeutic strategy successfully led to the resolution (samprapti bhanga) of Ardita within the prescribed treatment duration.

Samyaka Tarpana lakshan

1. Prakasha kshamata (proper tolerance to light subjected to the eye)
2. Vishada lochanam (clarity of vision)
3. Laghu lochanam (lightness in the eye)
4. Sukha swapna (satisfactory sleep)
5. Sukha avabodhatvam (good awakening)
6. Varna patavam

7. Nirvritti (establishment of pleasure and health in the eye)
8. Vyadhi vidhwamsa (destruction of the respective eye disorders)
9. Kriya laghavata (easy movements of eyes) [19,20]

Local action of Mahatriphala ghrita

Ghrita, or clarified butter, has the unique ability to traverse the minute channels or srotas of the eye. This capability is attributed to its lipid-soluble nature, allowing it to permeate the cornea easily. The lipid-soluble cornea facilitates the transmission of substances like ghrita, mainly due to its property of samsakaarasya guna anuvartanaat. This property enables ghrita to carry drugs effectively to the specific parts of the eye, reaching the cellular level. By doing so, ghrita enhances the functions of the cells, thereby contributing to the therapeutic effects of the drugs. This mechanism underscores the significance of ghrita in ocular treatments, leveraging its unique properties for targeted and efficient drug delivery to promote optimal eye health.[21]

Oral action of Vatavidhwansan rasa

The herbomineral drug described by Yogaratnakara is a well-known Ayurvedic formulation used in various types of Vata disorders. Its composition includes ingredients with katu (pungent) and tikta (bitter) tastes, possesses ushna virya (hot potency), and exhibits Vata-Kapha shamak properties (alleviates vitiated Vata and Kapha doshas).

Vatsanabha (*Aconitum chasmanthum*) contributes to the formulation of shoolhara (analgesic) and yogvahi (catalyst) properties. Additionally, Chitraka (*Plumbago zeylanica* Linn.), Kushtha (*Saussurea lappa*), Chandrasoora (*Lepidium sativum* Linn.), Nirgundi (*Vitex negundo* Linn.), and Trikatu (a combination of Sunthi, Maricha, and Pippali) work synergistically to reduce pain and inflammation. The bhavana dravyas, which include Nimbu swarasa and Arka ksheer, contribute to Vata anulomana action, promoting the normal flow of Vata dosha.[22] This herbal formulation, with its diverse properties and ingredients, is specifically designed to address Vata-related conditions, relieving pain and inflammation and promoting the balance of Vata and Kapha doshas.

CONCLUSION

The study suggests that Ayurveda is crucial in addressing health issues by targeting the root causes, thereby reducing the likelihood of recurrence. In the case of Bell's palsy (Ardita), the patient experienced complete relief from symptoms through Ayurvedic treatment without the need for oral steroids. This outcome highlights the potential of Ayurvedic principles in effectively managing Ardita vyadhi. The success observed in this study serves as a valuable reference, indicating that Ayurveda can be a viable alternative for managing Bell's palsy without resorting to conventional interventions such as oral steroids. The positive results underscore the importance of further research in this area, employing rigorous methodologies and larger sample sizes. This approach can expand our understanding of Ayurvedic management of Bell's palsy, potentially paving the way for broader acceptance and integration of Ayurvedic principles in treating neurological conditions.

Statement of informed consent: The authors certify that they have obtained the patient's consent to report his case along with the journal's images and other clinical information. The patient understands that his name and initials will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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