REVIEW ARTICLE

UNDERSTANDING OF ARDITAVATA W.S.R.TO BELL’S PALSY

S. N. BELAVADI¹, PRASHANTH A. S.²

Abstract

Ayurveda the science which guides about life style in terms of Ahara (Food), Vihara (Healthy regimen) and Achara (good conducts) that is healthy regimens ultimately keeps body healthy, happy and long life with free from diseases. In present era because of unwholesome food, inappropriate lifestyle, unrest etc leads to different disorders where Arditavata is one. In modern science which can be correlated to Bell’s palsy caused by dysfunction of facial nerve. Bell’s palsy equally found in both sex and prevalence of this disease is 6-7 cases per one lakh population.

Key Words: Ardita, Bell’s Palsy, Vatavyadhi, Ayurveda

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INTRODUCTION:

Arditavata is one among Vataja Nanatmaja vyadhi explained by Acharya Charaka. Acharya Sharangadhara also said Ardita is one among Vatavyadhi and explained it’s Niruki (definition). Arditavata is a disease where Mukhasankocha, Vakrata (Deviation) of Nasa (Nose), Bhru (Eye brows), Akshi (Eye), Lalata (Fore Head), Hanu (Chin) etc, will be seen. Ardita bedha (Classification) and Sadhyasadhyata (Prognosis) is said by Acharya Hareeta. This is treated with steroids to prevent secondary complication. As such in contemporary science there is no direct remedy for the same.

Mouth deviation, Deafness etc are the symptoms of Bell’s palsy. In present day the patients are increasing day by day particularly in winter and rainy seasons and they are approaching Ayurvedic doctor with lot of positive hopes. As Ardita is one among Vatavyadhi and for this Snehana and Swedana gives good results followed by different Panchakarma chikitsa.

Bell’s palsy most common in 3rd decade. The lesion is within facial cannel and may be due to reactivation herpes simplex virus/ infection.

Idiopathic isolated facial nerve palsy. This is common condition affecting all ages and both sexes.

Vascular compression and mass lesion over the facial nerve are the usual causes.

The patients noticed sudden unilateral facial weakness sometimes with loss of taste on the anterior 2/3rd of the tongue. Pain behind the ear is common at onset. Diagnosis made on clinical ground.

Definition (Niruki /Paribasha): According to Dictionary meaning of Ardita are Injured, Pained, Afflicted, Tormented, Wounded, Killed, Destroyed of a disease (Spasm of the Jaw bones, Trismus, Tetanus or Hemiplegia i.e. Paralysis of the muscles one side of the Face and Neck [1].

Ardhe tasmin mukhardhe vaa kevalasyad arditam

When Vatadosha gets vitiated lodged in half portion of the body or Face and produces lakshana over the Mukha (Face) is named as Arditaroga. Commentator Madhukosha on Madhavanidhana opines the same [2, 3]. Dalhana commentary on Sushruta said on the word Vakribhavati as vakrardha greevachyapvartate[4]. (Facial deviation) Acharya Sharangadhara with dipika commentary given similar opinion as that of Acharya Sushruta [5, 6].

According to Basavarajeeyam the one which produces Vakrata of Mukha(Facial deviation)
is called Ardita [7]. Acharya Vagbhata opines same as that of above said authors [8, 9].

**Synonyms (Paryaya):** Acharya Vagbhata considered “Ekayama” is Synonym of the disease Ardita. Ekayama means the disease where pain and deformity occurs in one side of face [10, 11].

**Causes for Arditavata:** Shirasa bharaharanana (Heavy weights on head), Atihasya (excessive laughing), Prabhishana (loud talking), Utrasana vaktra, Kshvathu (improper sneezing), Vishama upadhana (Sleeping on uneven bed), Kathinanam charvanaath (eating hard food particles), Acharya Arunadatta on Vagbhata commented on Shiro bharaharanadibir Vayuvruddho means aggravates Vata [10, 11]. Acharya Sushruta added Garbhini (Pregnant women), Suthika (Puerperium), Baala (who are young), Vriddha (old age), Ksheena (emaciated), Ashruk kshaya (lack of blood) they become victims of Ardita.

Ucchairya-vyahata- ratho atyartham, Sadatah kathinani cha, Hasato, Jumbhato, Bhaarate, Vishama shayana. Acharya Dalhana commented on the word Sutika as Prasuta Stree. Vaksanga as vacho anirgama. Netradi he said Bhru, Gandadi is considered [12, 13].

Achary Bhela additionally said Shastra kashtas praharascha, Gramya Gharmaatisevanath, Chardhana, Madhyapana, Dhanuscha vikarshanath, Nityam Vyayam sheelanam, Patina, Langhana, Avatam Sheetabhaktasya, Vyadhi karshita [14].

**Causes:** Exposure to cold subsequent compression of nerve trunk within rigid fallopian canal causes circulatory disturbances. Other important cause acute facial palsy includes Supportive otitis media, herpes zoster, head injury, Guillain berre syndrome, sarcoidosis and multiple sclerosis [15].

**Pathogenesis (Samprapti and Samprapti Ghatakas):** Charaka said Vata gets aggravated and spread in half portion of face or entire body and does shoshana of Rakta and other Dhatus thereby causing sankocha of the avayava located above the neck, leading to Vakrata of Mukha, Nasa, Lalata, Netra and Greeva ultimately produces the lakshnas of Arditavata. Acharya Chakrapani commented on the word “Ativriddha” as “Ativriddha grahanena vayobalavat prakopa” [16].

Acharya Sushruta said due to different nidana like Raktakshaya, Adhikabharavahana on Shiras Vata get aggravated, lodged in Shiras and manifest the disease Arditavata [17]. Acharya Vagbhata described the Samprapti as because of Nidana sevana Vata get increased and settle in Urdhwanga and produce lakshanas of Ardita. Acharya Arunadatta commented on the word “Urdwastitha” as “Shareerasya uparibhaga”.

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Prognosis: In About 80% of the patients improvements starts early and there is full recovery within a few week from the onset.

The most favorable prognosis signs are an incomplete palsy and early recovery of motor function within the first 5-7 days.

If there is evidence of denervation 10 days after onset, than recovery can be expected to be prolonged [18].

Prodromal symptoms:
- Romaharsha (Horripillation)
- Vepathu (Tremors)
- Netramavilata (Lacrimation of eyes)
- Vayu urdhvata
- Twacha suptata (Loss of sensation of skin)
- Toda (Pricking pain)
- Manyagraha (Torticollis)
- Hanugraha (Lockjaw)

Acharya Dalhana commented on the word Vepanasya as Kampanasheela (Tremors) and Twacha suptata as Twacha Sparsha agnanam [19, 20, 21].

Classification (Bedhas): Ardita is classified into 3 types based on Dosha anubanda as Vataja, Pittaja, Kaphaja [22].

Doshanusara Ardita Lakshana: Gadanigrahakara said

Vataja: Lalasrava (salivation), Kampa (Tremors), Spuranam, Hanugraha, Oshta

Pittaja: Jwara (fever), Trishna (Thirst), Murcha (unconsciousness) and Ushmata (Daha).

Acharya Bhavamishra instead Murcha added Moha.

Kaphaja: Shotha (Swelling) and Stambha (stiffness) in Ganda (chicks), Shiras (Head) and Manya (cervical).

Acharya Bhela explained 2 types Kevala Ardita, Sleshmopastabda

Acharya Vangasena said 4 types of Ardita they are Vata, Pitta, Kapha and Mishrita Ardita.

Mishrita Ardita Lakshana: According to Dosha anusara lakshana, Vepathu and Netramavilata [23].

Symptoms of Arditavata:
- Mukhavakrata (Facial deviation)
- Greevachapya (Cervical pain)
- Vaksanga (Inability to speak)
- Vaikruta Netradi (Deformities in Eye)
- Greeva, Chibhuka, Danta and Parshva vedhana (Pain in Cervical, Cheeks, and Tooth etc.) [24].

Commentator said on Vaksanga as anirgamo vachonasya (difficult to speak) that is unable to speak. Acharya Charaka added Jihwavakrata (deviation of tongue), Bhadhirya (Deafness), Swarabedha (Hoarseness of voice)

Acharya Chakrapani commented on the word Shotha (Sweeling) and Shoola (pain). Bhavamishra added Vyatha.
Jihwa vakrata (tongue deviation) as Bhojanamiti na samam mukhena khadati kintu vakra deshana. Jihwati kutila. On the word samutkshipto as immediately [25].

Vagbhata said Murdhakampa, Gandha agnana along with above mentioned lakshanas. According acharya Bhela included tasya nishpande vishamey, urdhwam viprekshate atyartham, tiryak aakarkeshaney, Oshtou shvayathuvanthou, Chibukam vinamyate, Stheevatyat atimatram [26]. means after closing eye the affected side of eye ball will move upward and backward which is indicative of Bell’s phenomenon positive. Acharya Yogaratnakara, Vangasena, Gadanigrahakara and Bhavamishra given similar opinion as said by above said acharyas [27, 28, 29].

To Sum up the Clinical features of Ardita according to different acharyas and Bell’s palsy for better understanding we can bifurcate the signs and symptoms based on organ involved

<table>
<thead>
<tr>
<th>BELL’S PALSY</th>
<th>ARDITA</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEAD &amp; FACE:</td>
<td>SHIRAS AND LALATA:</td>
</tr>
<tr>
<td>a) Tremor of Head</td>
<td>Shirashoola</td>
</tr>
<tr>
<td>b) Loss of furrows on forehead</td>
<td>Murdhakampa</td>
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<tr>
<td>c) Facial pain</td>
<td>Lalatavalinasha</td>
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<tr>
<td>d) Facial deviation</td>
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<tr>
<td>e) Facial weakness</td>
<td></td>
</tr>
<tr>
<td>f) Loss of facial expression on affected side</td>
<td></td>
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<tr>
<td>EYE:</td>
<td>NETRA:</td>
</tr>
<tr>
<td>a) Eye lid drops on affected side</td>
<td>Akshinimilana asamartyata</td>
</tr>
<tr>
<td>b) Inability to close on affected side</td>
<td>Netrastabdha</td>
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<tr>
<td>c) Excessive lacrimation</td>
<td>Ashrusrava</td>
</tr>
<tr>
<td>d) Pain in Eye</td>
<td>Akshishoola</td>
</tr>
<tr>
<td>Bhruvakrata</td>
<td>NASA:</td>
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<tr>
<td><strong>NOSE:</strong></td>
<td><strong>NASA:</strong></td>
</tr>
<tr>
<td>a) Deviation of nose</td>
<td>Nasavakrata</td>
</tr>
<tr>
<td>b) Loss of Nasal furrows</td>
<td>Nasavalinasha</td>
</tr>
<tr>
<td>c) Naso labial fold flattened</td>
<td>Gandha aghnana</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>MOUTH:</th>
<th><strong>MUKHA:</strong></th>
</tr>
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<tbody>
<tr>
<td>a) Angle of mouth droops</td>
<td>Mukha vakrata</td>
</tr>
<tr>
<td>b) Excessive saliva</td>
<td>Vaksanga</td>
</tr>
<tr>
<td>c) Tongue deviation</td>
<td>Mukhaparshva shithilata</td>
</tr>
<tr>
<td>d) Inability to speak</td>
<td>Jiwhavakrata</td>
</tr>
<tr>
<td>e) Loss of taste</td>
<td>Dantashoola</td>
</tr>
<tr>
<td>f) Food collects between teeth and cheeks</td>
<td>Rasashunyata</td>
</tr>
<tr>
<td>g) Pain in Cheeks</td>
<td>Chibhukavedana</td>
</tr>
<tr>
<td>h) Toothache</td>
<td>Lalasrava</td>
</tr>
<tr>
<td></td>
<td>Mukhashoola</td>
</tr>
<tr>
<td></td>
<td>Food droops out while eating</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>EAR:</th>
<th><strong>KARNA:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Hyperacusis (Abnormal acuteness of hearing)</td>
<td>Karnanada</td>
</tr>
<tr>
<td>b) Deafness</td>
<td>Badhirya</td>
</tr>
<tr>
<td>c) Pain in Ear</td>
<td>Karnashoola</td>
</tr>
<tr>
<td>d) Pain in stylomastoid part</td>
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</tbody>
</table>

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<tr>
<th>MISLLANEOUS:</th>
<th><strong>ANNYA:</strong></th>
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|  |  |
Differential diagnosis: Lyme disease, the Ramsay Hunt syndrome, Melkessson-Rosenthal syndrome, Acoustic neuroma

Prognosis (Sadhyasadhyata): In case of Arditaroga if patient become Ksheena (Emaciated), Lost Akshi nimeshana, Aspashta bhashana, diseases which crossed more than 3 years and Kamapanayukta Ardita is said to be Asadhya. Acharya Dalhana added Nasa, Akshi and Mukhasrava. Bhavamishra commented on the word “Animeshaakshasya” as Nimesha asmartha chakshushu. Acharya Dalhana commented on the word trivarsha as savasthara trayam (three years). Madhukosha commented Mukhamatram Ardita patanti. And also said Ardita without any upadravas should be treated and it is sadhya [30, 31, 32].

Acharya in Gadanigraha and Vangasena explained that incase of Arditaroga if patient is Dhanvan (rich) with difficulty in many years with lot of efforts Arditaroga become sadhya or may not be.

Complications: Common pattern included eye closer on lip movements, elevation of the angle of the mouth and blinking or when the eyebrow is raised the jaw winkling phenomenon, which is also called Wittenberg’s or the “Inverse Marcus-Gunn sign” in which jaw movements especially laterally causes ipsilateral eye closure. Occasionally the synkinetic movements may be extensive [33].

Management: Acharya Charaka discussed Ardita chikitsa as mentioned in case of Ardita Navanansasya (Erihine therapy), Murdhnitaila (Treatent carried out on head), Tarpana Ahara (Nutritive food), Nadisweda, Anupa mamsasiddha Upanaha Sweda (different Steam therapy) is carried out. Chakrapani commented on tarpana as Santarpana [34].

According to Acharya Sushruta Ardita chikitsasutra explained as the person suffering with Ardita who is Balavana and Atmavana in such patients’ first Vatavyadhi chikitsa is done. Then Mastishkya (Shirobasti vishesha), Nasya,
Dhuma, Upanaha, Sneha, Nadisweda adi Vishesha upachara is carried out \[35\].

Acharya Vagbhata explained Ardita chikitsasutra as teekshna Navananasya, Murdhnitaila, Shrotratarpana and Akshitarpansa. In case of Ardita if Shotha is present Vamana is carried out, in case of Daha and Ragayukta Siravyadha is done.

Acharya Bhavamishra explained Ardita chikitsasutra as the person who is suffering with Arditaroga to them Ghritadi Snehapana, Vatanashaka Nasya and Bhojana, Upanaha sweda and Shirobasti are fruitful \[36\].

**Vataja Ardita:** Dashamulakwatha, Matulungarasa, Balayakwatha siddha Ksheerapana. Mamsa is prepared, Ghrita consumed along with Navaneeta Ksheeera and Mamsarasayukta Bhojana is done later Dashamularasa pana is done.

**Pittaja Ardita:** Sheetala, Snehana prayoga, Ghritabasti or Kevala Ksheera prayoga.

**Kaphaja Ardita:** First Kapha kshayakaraka chikitsa then Brumhana chikitsa latter in case of Shothayukta Ardita Vamana is done \[37\].

Acharya Vangasena in Vatavyadhiadhipakara explained Arditaroga chikitsasutra in Vangaasamshita as in case of Adrita first Snehapana, Nasya, Vatanashaka bhojana, Upanahasweda and Bastikarama hitakara.

Chakrapanidatta of Chakradatta described Ardita chikitsa sutra as the person suffering with Ardita Mashasiddha Vada (Mashandaro) is consumed along with Navaneeta, Ksheera and Mamsarasayukta Bhojana is done later Dashamulakwatha is taken internally.

Apart from this Snehayukta Abhyanga, Shirobasti, Snehapana and Nasya are done regularly. The person who is following Auttarabhoutikika sneha will free from Arditaroga \[38\].

According to Yogaratnakara in Vatavyadhi chikitsa Arditavata chikitsa is explained as Mashasiddha Vada (Mashandaro) is consumed along with Navaneeta for 7days will pacify katina Arditaroga.

In Bhaishajyaratnavali in Vatavyadhi chikitsa prakarana Ardita chikitsasutra is explained as Swedanakarma, Vatanashakatala Abhyanga, Shirobasti, Snehapana, Snehanasya is done regularly. The person who consume Ghrita after food (Auttrabhoutikika sneha) definitely will pacify Arditaroga.

In case of Ardita Lashuna kalka mixed with 1tola of Navaneeta taken internally in few days Arditaroga get subside like how Vayuvgeha does vinasha of Megha in the same way Ardita get cured.
In Kalyanakaraka Ardita chikitsasutra is explained as Amlarasa and Dadipana, then different Swedas are given, Abhyanga is done with Arkataila. Avapeedana nasya is done [39].

**Ardita chikitsa according to acharya Bhela:**
Snehapana, Nasya, Sweda, Pathya anna. Upanahasweda Basti are prashastha chikitsa for Ardita. Anupa, Aoudakamamsa sidda upanaha [40].

**Sleshmoprasrushta Ardita Chikitsa:**
Anuvasanabastinena, Shirovirechana, Virechana (purgation) with Tilvaka or Bindughrita or taken Puranaghrita (Medicated Ghee) and Teekshna dhuma (medicated fumes). After Kapha get subside then Brumhana chikitsa is started. Vatavyadhi chikitsa is followed here. Then Vata and Kapha come to their own place [40].

Table No. 2- Ardita chikitsa according to different Acharyas

<table>
<thead>
<tr>
<th>Chikitsa</th>
<th>Charak</th>
<th>Sushruta</th>
<th>Vagbhata</th>
<th>Chakradatta</th>
<th>Bhavamishra</th>
<th>Yogaratnakara</th>
<th>Bhela samhita</th>
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<tbody>
<tr>
<td>Snehana</td>
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<td>Murdhnitaila</td>
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<td>Shirobasti</td>
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<td>Mastishkya</td>
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<td>Nadisweda</td>
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<td>Upanaha</td>
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<td>Nasya</td>
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<td>Dhumapana</td>
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<td>Vamana</td>
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<td>Basti</td>
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<td>Raktamokshana</td>
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</table>
Shamana Yoga:

- Rasarajaras- Ardita Majunphalasapa-Ardita- Avalehya prakarana
- Ekangaveeraras- Ardita-Rasarajasundara
- Maharasnadikwatha- Ardita-Kwathaparakarana
- Mahamanjishtadikwatha- Ardita
- Arditavataharakashaya
  (Dhanadanayanadikashaya)- Ardita
- Chagaladyaghritam (Brihat)- Ardita [41]
  Shatavarighrita and Mayurghrita
- Narayanatala- Ardita, Mahamashatala- Ardita

Diet and Regimen (Pathya and Apathya)

Pathya: Godhuma, Raktashali, Masha, Kulatha, Kukkuta, Chataka, Janghalamamsa, Patola, Shigru, Karavella, Dadima, Draksha, Badara, Ghrita, Dugdha, Lashuna, Matsyandika.


Treatment according to modern: A typical regimen might start with Prednisolone 1mg/kg body weight/day with gradually diminishing doses over the next 10-14 days.

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