



REVIEW ARTICLE

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

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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 *Nirukti* (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 canal 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 (Nirukti /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 bharaaharana* (Heavy weights on head), *Atihasya* (excessive laughing), *Prabhashana* (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 bharaaharanadibir Vayuvruddho* means aggravates Vata [10, 11]. Acharya Sushruta added Garbhini (Pregnant women), Suthika (Puerperium), *Baala* (who are young), *Vridhdha* (old age), *Ksheena* (emaciated), *Ashruk kshaya* (lack of blood) they become victims of Ardita.

Ucchairya-vyahata- ratho atyartham, Sadatah kathinani cha, Hasato, Jrumbhato, 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 kashta 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 "*Ativridhdha*" as "*Ativridhdha 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*".

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: *Lalasarava* (salivation), *Kampa* (Tremors), *Spuranam*, *Hanugraha*, *Oshta*

Shotha (Swelling) and *Shoola* (pain).
Bhavamishra added *Vyatha*.

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 vachanasya* (difficult to speak) that is unable to speak. Acharya Charaka added *Jihwavakrata* (deviation of tongue), *Bhadharya* (Deafness), *Swarabedha* (Hoarseness of voice)
Acharya Chakrapani commented on the word

Jihwa vakrata (tongue deviation) as *Bhojanamiti na samam mukhena khadati kintu vakra deshena. 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, urdhvam viprekshate atyartham, tiryak aakarkeshaney, Oshou shvayathuvanthou, Chibukam vinamyate, Stheevatya 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 No. 1 Comparison of Bell's Palsy and Ardita

BELLS' PALSYP	ARDITA
<p>HEAD & FACE:</p> <ul style="list-style-type: none"> a) Tremor of Head b) Loss of furrows on forehead c) Facial pain d) Facial deviation e) Facial weakness f) Loss of Facial expression on affected side 	<p>SHIRAS AND LALATA:</p> <p><i>Shirashoola</i></p> <p><i>Murdhakampa</i></p> <p><i>Lalatavalinasha</i></p>
<p>EYE:</p> <ul style="list-style-type: none"> a) Eye lid drops on affected side b) Inability to close on affected side c) Excessive lacrimation d) Pain in Eye 	<p>NETRA:</p> <p><i>Akshinimilana asamartyata</i></p> <p><i>Netrastabdhat</i></p> <p><i>Ashrusrava</i></p> <p><i>Akshishoola</i></p>

	<i>Bhruvakrata</i>
NOSE: a) Deviation of nose b) Loss of Nasal furrows c) Naso labial fold flattened d) Loss of Smell	NASA: <i>Nasavakrata</i> <i>Nasavalinasha</i> <i>Gandha aghnana</i>
MOUTH: a) Angle of mouth droops b) Excessive saliva c) Tongue deviation d) Inability to speak e) Loss of taste f) Food collects between teeth and cheeks g) Pain in Cheeks h) Toothache	MUKHA: <i>Mukha vakrata</i> <i>Vaksanga</i> <i>Mukhaparshva shithilata</i> <i>Jiwhavakrata</i> <i>Dantashoola</i> <i>Rasashunyata</i> <i>Chibhukavedana</i> <i>Lalasarava</i> <i>Mukhashoola</i> <i>Food droops out while eating</i>
EAR: a) Hyperacusis (Abnormal acuteness of hearing) b) Deafness c) Pain in Ear d) Pain in stylomastoid part	KARNA: <i>Karnanada</i> <i>Badhirya</i> <i>Karnashoola</i>
MISLLANEOUS:	ANNYA:

a) Fever	<i>Jwara</i>
b) General debility	<i>Dourbalya</i>
c) Pain over neck	<i>Greevashoola and Greevavakrata</i>
	<i>Shotha and Stabdhata</i>
	<i>Swarabhramsha</i>
BELL'S PHENOMENON:	<i>Netraghola chalana asamarthata</i>

Differential diagnosis: Lyme disease, the ramsay hunt syndrome, Melkersson-rosenthal syndrome, Aconstic neuromass

Prognosis (*Sadhyasadyata*): 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 or the jaw winking 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 Navananasya (Erihine therapy)*, *Murdhnitaila (Traetment 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 Vishesa upachara is carried out [35].

Acharya Vagbhata explained *Ardita chikitsasutra* as *teekshna Navananasya, Murdhnitaila, Shrotratarpana and Akshitarpana*. 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 Ksheera 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 *Vatavyadhiadhikara* explained *Arditaroga chikitsasutra* in *Vangasenasamhita* 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 *Auttarabhuktika sneha* will free from *Arditaroga* [38].

According to *Yogaratanakara* 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, Vatanashakataila Abhyanga, Shirobasti, Snehapana, Snehanasya is done regularly. The person who consume Ghrita after food (Auttrabhuktika 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 *Vayuvegga* 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].

Sleshmopasrushta Ardita Chikitsa:
*Anuvasanabasti(enema), 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

Chikitsa	Charak	Sushruta	Vagbhata	Chakradatt	Bhavamishra	Yogaratanakara	Bhela samhita
<i>Snehana</i>			+		+	+	+
<i>Murdhnitaila</i>	+		+				
<i>Shirobasti</i>		+		+	+	+	
<i>Mastishkya</i>		+					
<i>Nadisweda</i>	+	+				+	+
<i>Upanaha</i>	+	+					+
<i>Nasya</i>	+	+	+	+	+	+	+
<i>Dhumapana</i>		+					
<i>Vamana</i>			+				
<i>Basti</i>							+
<i>Raktamokshana</i>			+				

Shamana Yoga:

- *Rasarajas- Ardita Majunphalasapa- Ardita- Avalehya prakarana*
- *Ekangaveeraras- Ardita- Rasarajasundara*
- *Maharasnadikwatha- Ardita- Kwathaprakarana*
- *Mahamanjishtadikwatha- Ardita*
- *Arditavataharakashaya (Dhanadanayanadikashaya)- Ardita*
- *Chagaladyaghritam (Brihat)- Ardita* ^[41]
Shatavarighrita and Mayurghrita
- *Narayanataila- Ardita, Mahamashataila- 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.*

Apathya: *Kashaya, Tikta and Katurasa, Anashana, Guru, Abhisyandhi ahara, Sheetambu, Navadanya, Kalaya, Chanaka, Chinta, Adhikashrama, Vyayama and Vyavaya, Vegadharana.*

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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