



## THE COMBINED EFFICACY OF NASYA WITH KSHEERABALA 101 AVARTHI TAILA & THALAM WITH ERANDA TAILA AND NAVANEETHA IN ARDITA WITH SPECIAL REFERENCE TO BELL'S PALSY- A CASE REPORT

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**Abstract :** *Ardita is the disease manifestation of the condition involving weakness of half of face. This Ardita Vata Vyadhi can be correlated with Bell's palsy in modern science. Bell's palsy is manifested mostly by unknown causes. Nasya, Moordhini taila, Tarpana and Pinda swedas are said to be treatment for Ardita. The same treatment modalities told by Vaidya Manorama, which is a classical text book of Kerala, practicing by Keraliya Vaidyas. Navaneetha and Eranda taila thalam, Snigdha pinda svedam is mentioned in the management of Ardita. In this study Nasya with ksheerabala 101 avarthi tailam followed by Eranda tailam and Navaeetha thalam is done as the treatment of Ardita w.s.r to Bells palsy.*

**KEYWORDS:** *Ardita, Bells palsy, Eranda Taila, Navaneetha, Thalam, Kukkudanda pinda sveda, Nasya*

### I. INTRODUCTION

Ardita Vata Vyadhi is very important disease of the facial nerve because it affects all the facial expressions of the face. Ardita Vata <sup>1</sup>is a disease in which most important characters of human being that is facial and verbal expressions are affected. All Ayurveda Acharya has explained about Ardita Vata Vyadhi. Acharya Charaka explains Ardita Vata Vyadhi under the heading of Vata nanatmaja Vyadhi<sup>2</sup>. But Acharya charaka told that the limbs are also affected in the disease<sup>3</sup>. Acharya sushruta explained that only half of the face is affected in Ardita Vyadhi<sup>4</sup>.

Bell's palsy affects men and women equally. The incidence is 23 cases per 1,00,000 per year. Bell's palsy is caused by dysfunction of facial nerve<sup>5</sup>. The major symptoms of Ardita Vata, like facial deviation, inability to close the eye, on attempting closure eyeball turns upwards and outwards, Fluid runs out while drinking.

Ardita vata Vyadhi is treated in Ayurveda with the help of many procedures like Nasya, Akshi Tarpana, Murdhnitail, Tarpana etc. These treatments are very fruitful in treatment. Nasya, Moordhini taila, Tarpana and Pinda swedas are said to be treatment for Ardita. The same treatment modalities told by Vaidya Manorama, which is a classical text book of Kerala, practicing by Keraliya Vaidyas. Navaneetha and Eranda taila thalam, Snigdha pinda svedam <sup>6</sup>is mentioned in the management of Ardita.

Nasa has mentioned as outlet of Shiras<sup>7</sup>. The drug administered by Nasya works upon the vitiated Doshas and Dushyas and expels the Doshas situated in the Urdhwa jatrugatha pradesha through nasa.

Thalam is a modified form of Shiro-Pichu, which acts by the action of Bhrajaka Pitta<sup>8</sup>. The site of administration of Thalam is bregma, can be considered as the Adhipathi Marma, it is the junction of all the siras<sup>9</sup>.

Kukkutanda Pinda Sweda is a modified Pinda Sweda procedure, which helps to strengthen the paralyzed facial muscles. Kukkutanda Pinda Sweda is doing in the study as poorvakarma to Nasya. Here the study aimed to cure the pathology in the Shiras by Brmhana Nasya, the Shesha Dosha Shamana with Thalam and strengthening of facial muscles by Kukkutanda Pinda Sweda.

In modern medicine Bell's palsy is treated with steroids, Antiviral in modern medicine<sup>10</sup>. But Ayurveda have the specific line of treatment for Ardita Vata Vyadhi, which offers good results. So here intended treatment is to restore the neurological defect and minimize the facial deterioration has taken for prime importance.

**OBJECTIVES**

To evaluate the combined effect of Nasya with Ksheerabala 101 avarthi taila and Eranda taila, Navaneetha Thalam in Ardita.

**MATERIAL AND METHODS**

- Drug Source**

Required raw drugs were brought from Anamaya pharmacy and medicines were prepared in department of rasashastra and bhaishajya Kalpana.

- Clinical source:**

A total of 30 patients who are diagnosed with Ardita be selected from the OPD of TGAMC and Hospital, Ballari ,

**Inclusion criteria:-**

- Subjects of all gender, between the age groups of 12-60 years with the signs and symptoms of Ardita W.S.R to Bell's palsy will be selected for the study.
- Subjects of the Ardita with the history of less than 1 year were selected
- Patient who are fit for Nasya and Talam procedure

**Exclusion criteria:-**

- Bell's palsy due to Herpes zoster infection.
- Patient suffering from intracranial Hemorrhage, intra cranial tumors.
- History of trauma (Head injury).
- Patient having symptoms of Kaphaja Ardita.
- Patient having symptoms of Pittaja Ardita.
- Subjects suffering from uncontrolled Diabetes Mellitus, uncontrolled Hypertension and other systemic disorders which interfered with the course of intervention were excluded.

**Study Design**

Group	No. of Patients	Intervention
Single Group	30	Nasya Karma followed by Thalam

**PLAN OF TREATMENT**

- TOTAL STUDY DURATION
  - Nasya: - Nasya karma 7 days with Ksheerabala 101 avarthi
  - Visrama kala - 3 days( 8,9,10)
  - Thalam with Eranda Tailam and Navaneetha for 7 days
  - Follow up after 7 days . Observations done over- Before treatment, During treatment( 11th day), after treatment ( 18 th day ) and during follow up (24th day)

**DIAGNOSTIC CRITERIA :** The diagnosis was based on classical lakshanas of Ardita and the clinical manifestation of Bell's palsy

- Mukharda vakrata (Mouth angle deviation)
- Vaksanga (Inability to speak)
- Jatroordha vedana (Pain in upper part of face)
- Ashrusrava (Lacrimation)
- Lalasarava (Dribbling of saliva)
- Netra vikriti (Rolling of eyelids)
- Ekakshinimeelana with Bell's phenomenon
- Vaktram ekadeshana (Accumulation of food on one side)
- Mukhavakrata on hasana

**Assessment Criteria:** The patients response was assessed based on subjective and objective parameters.

1. Grade	Function Level	Symmetry at Rest	Eye(s)	Mouth	Forehead
I	Normal	Normal	Normal	Normal	Normal
II	Mild	Normal	Easy and Complete closure.	Slightly asymmetrical	Reasonable function
III	Moderate	Normal	With effort, Complete closure	Slightly affected with effort.	Slight to moderate movement.
IV	Moderately severe	Asymmetry	Incomplete closure	Asymmetrical with maximum effort.	None
V	Severe	Asymmetry	Incomplete closure	Minimal movement.	None

VI	Total paralysis	Total paralysis	Total paralysis	Total paralysis	Total paralysis
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House Brackman grading Scale	BT	DT	AT	AF
Grade I				
Grade II				
Grade III				
Grade IV				
Grade V				
Grade VI				

Mukhardha vakrata	Score	BT	DT	AT	AF
Normal	0				
mild Mukha vakrata	1				
Half Mukha vakrata	2				
Complete Mukha vakrata	3				

Netra vikrithi	Score	BT	DT	AT	AF
.Normal	0				
Partial upward rolling of the eye.	1				
Half upwards rolling of eye	2				
Complete upward rolling of eye	3				

Lalasarava	Score	BT	DT	AT	AF
Constant (Profuse) Lalasarava.	3				
Intermittent (Moderate) Lalasarava	2				
Partial (Mild) Lalasarava	1				
Normal	0				

<b>Jatroordha vedana</b>	Score	BT	DT	AT	AF
No pain	0				
Mild pain	1				
Moderate pain	2				
Severe pain	3				

### OBSERVATIONS

The present study revealed that incidence of Ardita was more common in 46-55 age group, (60%) patients are male, 24 patients (80%) are Hindu, 26 patients (86.6%) are married, 12 patients (40%) are heavy workers, 19 patients (63.6%) are in low income group, 11 patients (37%) had tobacco as addiction, VP prakruti patients were 18 (60%), 18 patients (60%) had vishama agni, 20 patients (66.6%) had krura koshta.

### RESULTS

We have performed the **Friedman's test** on the data provided for different symptoms namely mukharda vakrata, netra vikriti, lalasarava, jatroordha vedana, house brackman grading scale. If the 'p' value is less than 0.01 we can reject the null hypothesis with a confidence interval of 1%. The data provided for each symptoms are with four columns representing four treatment stages i.e; before treatment, during treatment, after treatment, and after follow-up with the column values as changes in the symptoms coded as ranks with the values 0 to 3. The results of the Friedman's test for each condition are given below.

#### Mukharda vakrata

p = 4.3988 e-16

Note: The p value obtained is less than 0.01 hence the results are highly significant.

Columns	Mean	SD	Chi-sq	Prob>Chi-sq
BT	1.758621	0.510964	74.61	4.39883e-16
DT	1.586207	0.627765		
AT	0.724138	0.5914		
AF	0.37931	0.56149		

#### Netra vikriti

p = 7.5955 e-16

Note: The p value obtained is less than 0.01 hence the results are highly significant.

Columns	Mean	SD	Chi-sq	Prob>Chi-sq
			73.5	7.59546e-16
BT	1.206897	0.619868		
DT	1	0.534522		
AT	0.206897	0.491304		
AF	0.137931	0.441114		

**Lalasarava**

p = 1.7165e-10

Note: The p value obtained is less than 0.01 hence the results are highly significant.

Columns	Mean	SD	Chi-sq	Prob>Chi-sq
			48.44	1.7164e-10
BT	1.241379	1.023131		
DT	0.586207	0.779984		
AT	0.310345	0.603765		
AF	0.103448	0.309934		

**Jatroordha vedana**

p = 9.7394e-06

Note: The p value obtained is less than 0.01 hence the results are highly significant.

Columns	Mean	SD	Chi-sq	Prob>Chi-sq
			25.96	9.73942e-06
BT	0.586207	0.824502		
DT	0.448276	0.73612		

**House brackman grading scale**

p = 1.4937e-16

Note: The p value obtained is less than 0.01 hence the results are highly significant.

Columns	Mean	SD	Chi-sq	Prob>Chi-sq
			76.8	1.49e-16
BT	3.448276	0.73612		
DT	2.793103	0.718505		
AT	2	0.654654		
AF	1.413793	0.627765		

**DISCUSSION**

Nasya karma is the best treatment for the Urdhajatru vikaras. . In the procedure of Nasya ,trividha karma ie poorvakarma, pradhana karma and paschat karma has its importance for attaining its effect on the disease. According to Susruta Samhita<sup>11</sup>,Snehana nasya is indicated for Vatabhi bhoote siras, Ardita is one among these. According to the medicine used for nasya, it can be snehana – Vatapitha hara dravya siddha Sneha.

The contents of kukkutanda sweda are kukkutanda , ghritha and saindhava. All the contents are having Vatahara properties which are useful to alleviate the facial weakness. The egg which contains highly nutritive substances like glucosamine, chondroitin sulfate, hyaluronic acid, ovotransferrin,desmosine and isodesmosine, Iysyl oxidase, Iysozyme and the unique combination of 113 amino acids with many mineral supplements . Importance of chondroitin sulphate, hyaluronic acid & glucosamines present in egg

Chondroitin sulfate :-Chondroitin sulfate proteoglycans ( CSPGs) are extracellular matrix components that contains 2 structural parts with distinct fuction, . CSPGs are known to be involved in important cell processes like cell adhesion and growth, helps in the repair of cell damage. It posses anti -inflammatory and analgesic properties , so useful in relieving muscle weakness.

Hyaluronic acid It is a derivative of hyaluronic acid which has tissue regeneration potential,HA based formulations exhibit remarkable anti- wrinkle, anti nasolabial fold, anti aging, space filling and face rejuvenating properties. HA works through soft tissue augmentation, improved ski n hydration, collagen and elastin stimulation and face volume restoration.

Glucosamine Glucosamine compounds have been reported to have several beneficial effects on the skin or skin cells, because of its stimulation of hyaluronic acid synthesis , glucosamine has been improve skin hydration, and decrease wrinkles, and strengthen the

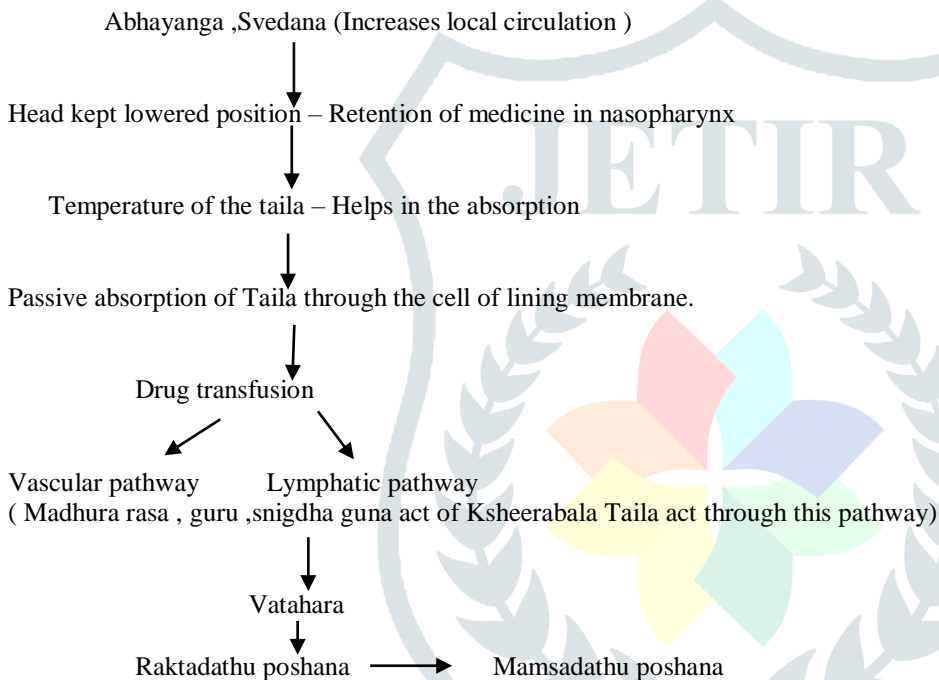
facial muscles

### PROBABLE MODE OF ACTION OF NASYA IN ARDITA

- Ardita is one among the Vatajananatmaja Vata vyadhi. The samanya nidanas along with the visheshha nidana causes prakopa of Vata dosa, The prakopita Vata dosa got sthanasamsraya in the Shiras and leads to the disease Ardita.
- As in the present study, Ardita told by susruta and vagbhata are selected and special reference is given to the Bells palsy and it is a urdhwajatru vikaram. Nasya is selected as the treatment for Ardita. Caraka told 2 types of Navana naaya, snehana and shodhana nasya. Here the nasya selected is the snehana type. Tailam is the best medicament for the Vata, hence tailam is selected as the medium of Oushadha. The Rasadi panchaka of the bala moola shows madhura rasa, snigdha, guru and pichila guna, madhura vipaka and seetha veeryam. According to all nigantukaras, Bala is best to counter the prakopita vayu and pitha. According to kaidarya nigantu, it helps dhathu, ojas bala vardhana. According to the Danwantari nigantu, bala is balya. The gavya ksheera is rasayana, jeevan iya and kshatha ksheena hitham, it pacifies Vata pitha. The ksheerabala thailam containing ingredients of bala moola kalka, ksheera and tila thailam. Hence ksheerabala thailam is best in treating Vataja vikaras and pacifies pitha and poshana of dhathu

The dose for the nasya is selected as 6 bindhu, as the sneha selected is 101 avarthitha ksheerabala thailam, the potency of avarthitha thailam is high and it has rasayana property also.

### PROBABLE MODE OF ACTION OF NASYA



### PROBABLE MODE OF ACTION OF THALAM ON ARDITA

When thalam is analysed with the background of the anatomical information, it can be seen the site of application is very important. The medicine is applied over the superior sagittal sinus, one of the major intracranial sinuses, on an area which is rich in vascular supply as well as return and having direct links with the inside of cranium. At bregma, being the junction of sutures, the chance for getting into the skull is higher than the surrounding scalp. When the medicine is applied on the proper site, it gets its access into the skull because of the pakam by Bhrajakapitha. Here the absorption of the drug is in such minute form that only the minimum quantity required for the actual transfer of gunas takes place. So for the sake of better understanding it may be commented that it is the veerya of the drug that gets absorbed to the twak. This absorbed veerya is then received by the rasa and raktha dhathus and is carried first to the inside of the head and later get spread all over the body through rasayanis and raktavaha srothases.

The eranda tailam is having Madhura, Kashaya rasa, ushna veerya, sukshma, teekshna, guru, pichila guna and it is Vatakapahara, while navaneetha is seetha veerya, it is Vatapitha asrahara. Navaneetha is specially indicated for Ardita also, it will act on the samprapthi, and act on the dosas, which got sthanasamsraya in the shiras. The thalam applied as a combination of eranda tailam and Navaneetha causes to alleviate the prakopita Vata. Navaneetha is rich in calcium, phosphorus, potassium. The sukshma, teekshna properties of eranda tailam, helps to easily penetrate the minerals, these minerals promote the neuron action. As the thalam used is a combination of eranda tailam and navaneetha, due to the properties of eranda tailam, it also causes Vatahara, the eranda taila is having ushna veerya, which in turn protects the sthanika dosa kapha.

### CONCLUSION

- Ardita vyadhi is one among the vataja nanatmaja vyadhi explained by all Acharyas. The involvement of face in the Ardita is specially told by Acharya Susruta and Acharya Vagbhata, hence in the study Ardita with special reference to Bells palsy is selected
- Bells palsy as it is idiopathic. Visheshha nidanas which cause Ardita explained by Acharya susruta, Acharya Vagbhata and Yogaratnakara.
- In my present study dukhasayana, sirasobharaharana, katinacharvana, jumbha vega dharana, jihvanirlekhana are the visheshha nidanas found.

- The nidanas causes Prakopa of vata dosha in the shiras ,the Prakopita vata dosha leads to kshaya of the raktadathu results in undernourishment of neurons of Facial nerve.
- Sthanika abhyanga with ksheerabala tailam ,followed by kukkudanda sweda, as done as a poorvakarma prior to nasya , it will increase Rakta prasada (increase blood circulation) and hence helps in drug absorption and dathu poshana, moreover abhyanga will helps to relieve the prakopita vata and kukkudanda sweda will helps to nourish the mamsadhathu- facial muscles
- The drug used for nasya karma is ksheerabala 101 avarthi tailam, ksheerabala tailam has Brmhana, Rasayana,neurotonic action and neuroprotective action, which leads to regain the proper functioning of facial nerve.
- Thalam is done with Eranda taila and navaneetha mixture, both the drugs will does samana of pranavayu, Erandatailam causes Srotosodhana and helps in penetration. Navaneetha is rich in calcium, phosphorus, potassium. These minerals has nervine tonic action.
- The study shown statistically highly significant result in both subjective and objective parameter with p value less than 0.001

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