

RESEARCH ARTICLE

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EFFECT OF NASYA AND NASAPANA IN THE MANAGEMENT OF ARDITA

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ABSTRACT

Facial paralysis is a disease where partial or complete injury to facial nerve takes place leading to structural and/or functional impairment, sometimes living synkinesis. Face a major tool of communication for human interactions, get affected. Also, the chances of recurrence are greater. Ardita with chronicity of three years or more is considered incurable in Ayurvedic texts. Panchakarma is one of the branches of Ayurvedic medicine, which helps to eradicate the disease in such a way that reoccurrence will not occur. Nasya and Nasapana are highly preferred for Vatavyadhi among them. The Nasya with Bala taila and Nasapana with Mashabaladi kwatha which is the nasal administration of internal medication in larger dose was administered in Ardita. Nasapana probably generates a chemical impulse which is further transformed into electrical impulse, finally converted into a neuronal impulse. This neuronal impulse influences on cerebral cortical areas thereby producing a stimulatory effect to the facial muscles and strengthens them.

KEYWORDS: Ardita, Nasya, Nasapana, Mashabaladi kwatha

INTRODUCTION

Man has urge to live long and healthy life. Now a days lifestyle has become a major cause for aggravation of 'Vata' dosha. 'Vata' is the control factor for the mechanism of mind and body. Ardita is one of the diseases caused by aggravation of 'Vata'. Ardita has been enlisted amongst the eighty types of Nanatmaja Vata Vyadhis.¹ The disease has been described in almost all Ayurvedic literature under Vatavyadhi. The panchakarma therapy of Ayurveda helps to prevent and cure the disorders of 'Vata'.

According to Sushruta samhita, Nidanasevana leads to prakopa of 'Vata' situated at Shira, Nasa, Oshtha, Chibuk, Lalat and Akshi which further give rise to Ardita,² which affects half of the face and then make upashoshana of Asrik, Bahu, Pada and Janu, also the half of the Mukha and Jihva, as mentioned by Charaka. Sushruta has mentioned Ardita as limited to face or upper part of the body. Madhavanidana³ and Bhavaprakasha⁴ followed the same.

It can be stated that Ardita can be correlated with facial paralysis based on its signs and symptoms mentioned in texts. Here, temporary suspension or permanent loss of function, especially loss of sensation or voluntary motion of unilateral side of face is considered. It occurs due to any injury to facial nerve - VIIth cranial nerve. Facial paralysis disability leads to a of communication by loss of facial expression which is a major part of all human interaction. Taking all above points into consideration its recurrence and multi therapeutic indications for it in Ayurvedic texts, the disease was selected to find a measure that could help in restoring quality in life of facial paralysis patients. Here, Nasya and Nasapana can be highly preferred for Vatavyadhi.

REVIEW OF NASAPANA:

There were no traces of Nasapana in Samhita kala. We can find the explanation of Nasapana in recent times of Yogaratnakar. In the context of Bahusheershagata vata Nasya with taila prepared from Masha and saindhava is beneficial in the management of Bahusheershagata vata. In Bhaishajya ratnavali the drug mashabaladi kwatha and treatment as **'nipita'** can be considered as Nasapana is mentioned for Ardita chikitsa.⁵

Chakradatta:6

In vatavyadhi chikitsa Nasapana is stated in management of Apabahuka, Viswaci, Pakshagata, Ardita and Manyastamba. The detailed description of procedure is not found. Yogas like Baladi kwatha, Masha Baladi Kwatha, Dashamoola Bala Masha Kwatha are mentioned.

Bhavaprakasha:⁷

Bhavaprakasha has included the same in his work and he has added Baladi Kwatha in management of Sheershagata Vata in Vata Vyadhi Chikitsa.

Vangasena Samhita:⁸

In Vata Vyadhi Chikitsa, Vangasena has mentioned the same Yogas for Nasapana; he has added Dashamoola Kashaya in managing Pakshagata.

AIM AND OBJECTIVE

-To assess the effect of Nasya and Nasapana in the management of Ardita.

MATERIALS AND METHODS

Four patients of Ardita completed the course of therapy, from the O.P.D. & I.P.D. of S.J.G Ayurvedic Medical College and Hospital, Koppal, Karnataka.

STUDY DESIGN: Pilot study

A sample of four patients presenting classical signs and symptoms of Ardita according to Ayurvedic classics were selected for the study. After subjecting for intervention, effect of Nasya and Nasapana was assessed.

DURATION OF THE STUDY: 08 Days	
Mode of Intervention:	

Procedures	Drug	Dose	Duration
Nasya	Bala Taila ⁹	8	4 days
Karma		Bindu	
		in	
		each	
		nostril	
Nasapana	Mashabaladi	24 ml	4 days
	Kwatha ¹⁰	in	
		each	
		nostril	

DOSE OF NASAPANA:

Chakradatta has advocated the dosage of dravadravya used for Nasapana should be like the kashaya which is given orally i.e., 1 pala. (48ml).¹³ It is the total dose of administration and must be divided equally for administering into both the nostrils i.e., 24 ml in each nostril.

In most of the medicines explained in nasapana, acharyas mentions about prakshepa dravyas which are teeksha and rooksha. In some context tailas are mentioned as prakshepa dravya and some medicines are used in the form of ksheerapaka. This can be administered according to the dosha association in the disease. So, in such cases we can incorporate the dosage principles of nasya in this context.

CRITERIA FOR ASSESSMENT:

Based on scoring of cardinal signs, associated symptoms, observed symptoms and Doshanubandhita lakshanas.

Symptoms	Grade - 1	Grade - 2	Grade - 3	Grade - 4	
Vaktrardha	Normal	Mild mukha	Half mukha	Complete mukha	
mukha vakrata		vakrata	vakrata	vakrata	
Vaksanga	Normal	Pronouncing	Pronouncing	Complete	
	speech	with less efforts	with great	Vaksanga	
	(whistling)		efforts		
Netra vikriti	Normal	Partial upward	Half of the	Complete upward	
		rolling of eye	upward rolling	rolling of eye	
			of eye		
Griva Chibuk	No vedana	Vedana – limited	Vedana on half	Vedana –all over	
Dantanam		to one site / only	of the affected	the affected side	
Parshve vedana		at night/ morning	side of face	of face (and / or	
		(intermittent)		constant)	
Sphurana:	No sphurana	Partial and/or	Intermittent	Constant and/or	
(Trembling)		limited to one	and/or on upper	all over the	
		side only	or lower half of	affected side of	
			the affected side	face	
			of the face		

PROCEDURE OF NASYA KARMA:11

1. Poorva Karma:

-Drugs and instruments required for Snehana, Swedana and Nasya were collected.

-Abhyanga with lukewarm Mahanarayana taila was done over Urdwanga Pradesha i.e on face.

-Mrudu nadi Swedana was given after covering the face and eye with cotton.

-The Swedana procedure continued till light Swedotpatti on face was observed.

2. Pradhana Karma: After completion of Poorvakarma, patient was made to lie on table in supine position and patient's head is lowered to 45^{0} angles from edge of the table.

-The limbs were kept spread apart on both sides. The foot portion was slightly raised by keeping a pillow underneath.

-Patients were advised to relax with closing the eyes.

-Lukewarm Bala taila (8 drops) was instilled in each nostril of the patient.

-Patients were asked to inhale it deeply.

-Patients were advised to spit out the secretion, which was collected in Oropharynx.

3. Paschat Karma:

-After Pradhana Karma patient was advised to lie in supine position. Panitapa Swedana was given on face. Then forehead, frontal, maxillary and temporal areas were massaged. -Patients were advised to spit out the secretion.

-Patients were advised to take rest for 1-2 minutes in supine position.

-Gandusha with Luke warm water was done.

-Patients were instructed not to take food, not to expose to direct air, neither to have a cold-water face wash and head wash.

Nasya was done prior to Nasapana because it was helping in elimination of doshas and to remove any infection in the nostrils, which will not interfere administration of drug Mashabaladi quatha during Nasapana.

NASAPANA VIDHI: 12

There is no specific guideline or procedure mentioned for nasapana. Chakradatta explains the procedure of Nasapana as **Pibennasyam** which must be understood like drinking through nose. Chakradatta and Yogaratnakar used the word **Nasyanipito** and the word 'nipito' can be understood in two meanings one is 'paana' and the other is 'concentrated form of dravya'. Therefore, the procedure is taken as nasyavat i.e the poorvakarma, paschat karma and all other precautions were taken like nasya.

Poorva Karma:

- Preparation of Mashabaladi kashaya was done as per Kashaya vidhi mentioned in classics.

Sterilization of Gokarnika yantra for Nasapana was done.

- Patients were advised to have food.

Bahyasnehana in the form of Mrudu Abhyanga was done to shiras first and then over Gala, Kapola, Lalata and Karna.

- After Snehana, mild Swedana was given to the part of the body above the shoulders.

Pradhana Karma:

- Patients are made to sit comfortably on a chair.

(As there is no such specifications seen in classic about the position for Nasapana, the procedure Nasapana is followed as Nasyavat. For Nasya It is explained in the classics that the position of head should be little lowered and on the same time legs should be raised little. But practically it was found difficult for the patient to swallow kashaya in this position so the best position for Nasapana was found to be sitting posture and at the same time the head must be slightly elevated.)

- The head of the patients are then elevated and with the help of thumb patient's nose raised simultaneously and the medicine is poured into the nostril at a stretch with the constant pressure over the bulb. The same procedure was repeated for another nostril.

- During the procedure patients were asked to swallow the drug Mashabaladi quatha.

Paschat Karma:

- Gandoosha and kavalagraha was followed.

The patients were advised to take sukhoshna jala and laghu ahara.

- Patients were strictly advised to avoid sheetajala snana and sheetajala pana during the whole course.

Observation and Precautions during Nasapana:

- In some patients, cough reflex was observed due to improper swallowing of the Mashabaladi kwatha.

Other instruments like Jalaneti pot were also used, during which there was difficulty in breathing and more cough observed. Therefore, Jalaneti pot may not be used as it obstructs or closes one side of nostril, making it difficult for breathing.

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Symptoms	Subject - 1		Subject - 2		Subject - 3		Subject - 4	
	BT	AT	BT	AT	BT	AT	BT	AT
Vaktrardha mukhavakrata	G 3	G 2	G 3	G 2	G 4	G 3	G 4	G 3
Vaksanga	G 3	G 2	G 3	G 2	G 3	G 3	G 3	G 2
Netra vikriti	G 3	G 3	G 3	G 2	G 3	G 3	G 2	G 2
Griva Chibuka Dantanam Parshve vedana	G 3	G 2	G 4	G 3	G 3	G 3	G 3	G 2
Sphurana	G 3	G 2	G 2	G 2	G 3	G 2	G 3	G 2

OBSERVATION AND RESULT: The symptoms of four subjects were as follows

All the four subjects who underwent both Nasya and Nasapana have shown very good improvement in Vaktrardha mukhavakrata (Deviation of angle of mouth), vaksanga (Slurred speech), Netra vikriti (Upward rolling of eyeball) and greeva chibuka dantanam parshve vedana (Pain around mandibular region) after the complete treatment of 8 days.

DISCUSSION

Drugs administered in the nasal route may have better effect by the systemic delivery of medication due to high degree of vascularization and permeability of the nasal mucosa. Hence, in Nasapana the kashaya has better nasal drug absorption. Moreover, Nasapana is unique due to its matra and route of administration. It is taken in equal quantity as that is given orally, so administration of larger amount of Nasapana dravya through nostrils also stimulates Prana vata which controls all indrivas.

Most of the drugs used in the Nasapana are either Kaphavata Shamaka or Vata Shamaka. Some of the drugs are Teekshna such as Hingu, Saindhava and Eranda moola. They produce irritation of the nasal mucosa which increases the nasal secretions as a result there is increased circulation. It also probably generates a chemical impulse which is further transformed into electrical impulse which is finally converted into a neuronal impulse. This neuronal impulse influences on cerebral cortical areas thereby producing a stimulatory effect leading to evacuation of dosha.

Also, the irritant effect of Nasapana dravya increases blood circulation to the brain. So, the accumulated morbid doshas are expelled out through small blood vessels. Ultimately the morbid dosha are thrown out along the nasal discharge, tears and saliva. Also, the vatashamaka drugs and Brumahaniya drugs alleviate vata. Hence probably this effective preparation is in both Dhatukshayajanya and Margavaranjanya Vata Vyadhis.

PROBABLE MODE OF ACTION OF NASAPANA:

Probable mode of action can be understood by following concepts:

- 1. Drug Absorption via nasal mucosa.
- 2. Drug Absorption via gut.
- 3. Procedural effect of Nasapana

1. Drug Absorption via nasal mucosa:

Regarding the absorption of drug through the nasal mucosa it is possible that a fraction of this drug is absorbed through the nasal mucous membrane. Many nerve endings are arranged in the peripheral surface of mucous membrane i.e, olfactory, trigeminal etc. Probably the drug after entering the nasal cavity first reaches the olfactory epithelium through which it reaches the olfactory nerve and from there it enters cribriform plate of ethmoid bone and reaches anterior cranial fossa. Finally, it probably reaches the medial and lateral olfactory areas of cerebral cortex and will be stimulated by Nasapana dravya and impulses are transferred through central nervous system. This results in better circulation and nourishment of the organs.

Many drugs absorbed through the rich blood supply of the nasal mucosa enter the systemic circulation more rapidly than administered orally. Due to Ushna guna of drugs the Dosha sanghata (compactness) Vilayana takes place. Action of Tikshnaguna is to break the mala and dosha in microforms. Due to Sukshma guna, drug reaches micro-channels, disintegrates endogenic toxins, which are then excreted through the micro-channels (Anupravana bhava).

2. Drug Absorption via gut:

In order to produce an effect, a drug must reach its target site in adequate concentration. This involves several processes embraced by the general term pharmokinetics.

In general, these processes are:

a. Administration of the drug.

b. Absorption from the site of administration into the bloodstream.

c. Distribution to other parts of the body, including the target site.

An important step in all these processes is the movement of drug molecules through cellular barriers (e.g., intestinal walls). Phagocytosis is one process where the absorptive cells engulf the material and exerts its action. After the dravya is administered into the gut, absorption is accomplished with the help of enterocytes. The end products are absorbed mainly in the intestines through the villi. Each villus is connected to the circulatory and lymphatic systems.

The dravyas are absorbed with the help of energy by an enzyme and the sodium ion cofactor. Absorbed drug enter directly into the circulatory system and fat soluble into lymphatic system by the absorptive cells of villi, which then go to the liver via portal vein for metabolism. Here we need to take consideration of yakrit which is Raktavaha Sroto Mula and Siras being Upadhatu of Rakta Dhatu, the dravya when reaches yakrit does the poshana of sira and thereby helps in Samprapti Vighatana.

The intestinal villi may also be taken as Pakwashaya – seat of vata, as the general rule of pharmacokinetics when the drug reaches its target it has to exert its action. A careful review of principles of Ayurvedic physiology and pharmacology indicates that Ahara (food substances) and Oushadha (drugs) Dravyas undergo digestion and metabolism synthesizes nutritive and active principles along with Kitta formation.

3. Procedural effect of Nasapana:

When dravya in the Nasapana is instilled into the nostrils, it passes through nose, nasopharynx, oropharynx, glottis, epiglottis and engulfed into the digestive tract. During which, from the movement caused due to passing of the dravya may stimulate facial nerve and the affected muscles around the face, the mukhavakrata may get corrected.

CONCLUSION

Nasya which is administered first, helps in clearing out the dosha and channels of the shiras and helps the saliva and sputum not to enter the digestive tract during the Nasapana. Effect of Nasya and Nasapana was found to be an effective procedure in all the four patients in the management of Ardita. Procedure of Nasapana and because of drug Mashabaladi kwatha, stimulates and strengthens the affected muscles and nerves around the face by pacifying vata.

REFERENCES

1. Ashtanga Hridaya, Sarvanga Sundara commentary of Arunadatta and Ayurveda Rasayana of Hemadri, edited by Bhishagacharya Hari Sadashiv Sastri Paradakara Vaidya, Varanasi; Chaukambha Surbharti; Reprint- 2010.

2. Sushruta Samhita, commentary of Dalhanacharya; Edited by Vaidya Yadavji Trikamji Acharya; Nidana Sthana 1/38-42; Choukhambha Sanskrit Sansthana, Varanasi, Reprint 2011.

 Madhava Nidana, Sri Vijayarakshita & Srikantadatta; Vatavyadhi nidanam 22/45-47; Choukhambha Sankrit Sansthana, Varanasi; Reprint edition 2012; Page No.164
Bhavaprakasha, Sri Pandit Brahma Shankara Mishra; Vata vyadhi adhikara 24/65-66, Vol II, Choukhambha Sanskrit Bhavana, Varanasi, Reprint edition 2013; Page no. 234

5. Bhaishajya Ratnavali, Shri Govinda Dasji, Choukhambha Sanskrit Sansthana, Varanasi, Vol II, 26/71-72; Reprint edition 2014, Page No. 143

6. Chakrapanidatta, Cakradatta- Chikitsa Sangra, translated by P V Sharma, Chaukambha Publishers, Varanasi; 2007

7. Bhavaprakasha, Sri Pandit Brahma Shankara Mishra Vata vyadhi adhikara 24/68-69, Vol II, Choukhambha Sanskrit Bhavana, Varanasi, Reprint edition 2013; Page no. 234 8. Vangasena, Vangasena Samhitha, Nirmal saxena, Choukamba Sanskrit Series Office, First edition, Varanasi.

9. Bhaishajya Ratnavali, Shri Govinda Dasji, Vol II, Chapter 26/273-278; Choukhambha Sanskrit Sansthana, Varanasi, Reprint edition 2014, Page No. 179

10. Bhaishajya Ratnavali, Shri Govinda Dasji, Vol II, Chapter 26/71; Choukhambha Sanskrit Sansthana, Varanasi, Reprint edition 2014, Page No. 143

11. Charaka Samhita, Vaidya Yadavji Trikamji, Cha.Si.9/98-102; Choukhambha publication, New Delhi, Reprint edition 2014, Page no.723

12.Yogaratnakar, Shri Brahma Shankar Shastri, Vata vyadhi Chikitsa, Choukhambha Prakashana, Varanasi, Page no. 518

13. Sharangaradhar Samhita, Pandit Parashuram Shastri Vidya sagar; Madhyama Khanda, 2nd chapter; Choukhambha Sanskrit Samsthana, Varanasi, Reprint edition 2013

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