



## A CLINICAL STUDY TO EVALUATE THE THERAPEUTIC EFFECT OF PRASAARINI TAILA NASYA ALONG WITH SHAMANA CHIKITSA IN APABAHUKA

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## ABSTRACT

Pain and aches in muscles and joints will be seen in all ages. Though the cause might differ during the later years of life, most people will have the tendency to ignore the pain and think of it as a minor problem. Diseases which are affecting the shoulder joint are many in number. Some of them are Rotator cuff diseases, Glenohumeral disorders, Acromion clavicular joint disorders, and Referred pain. Frozen Shoulder comes under Glenohumeral disorders. It is also known as Peri arthritis or Adhesive Capsulitis. Stiffness along with pain is a symptom present in Frozen Shoulder. The clinical manifestation of *apabahuka* is produced due to the morbidity of *vata dosha* alone or in the combination of *kapha* along with *vata*. Acharya *charaka* and *vagbhata* highlighted *Nasya* as the effective line of treatment. *Samanya Vatavyadhi chikitsa* is the choice of treatment. In *Kevala vataja* and *Dhatukshayaja apabahuka*, the *samanya vataja chikitsa* are the choice of treatment. It was a clinical study with a pre and post-design in 30 patients who were diagnosed with *apabahuka*. After examination *Nasya* had given for patients with *Prasaarani Taila* after *sthanika abhyanga* and *nadisweda* with respective oil for 7 days along with *rasna guggulu* as *shamana aushadi* for 28 days. The assessment criteria were noted before and after treatment and on follow-up. Among the subjective and objective parameters, out of 30 patients in this study, 6 patients (20%) were getting

Moderate, 22 patients (73%) were getting Marked improvement and 2 patients (7%) were getting Complete Remission.

**Keywords:** Apabahuka, Frozen Shoulder, Nasya, Prasaarani Taila, rasna guggulu.

## INTRODUCTION

Pain and aches in muscles and joints will be seen in all ages. Though the cause might differ during the later years of life, most people will have the tendency to ignore the pain and think of it as a minor problem. When they are painless with the problem, they ignore it as a minor issue. But when this pain aggravates people realize the importance of addressing these health issues. Meanwhile to say that Pain is the Gift, where it mimics certain health issues. Joints may get affected easily and may lead to pain, inflammation, and a decrease in the range of movement. Pain in the Joints may interfere with the routine activity of the individual and it may be difficult to lead a healthy life. Movements of the shoulder joint are Flexion and Extension, Abduction and Adduction, Medial and Lateral rotation, and Circumduction<sup>1</sup>. Diseases which are affecting the shoulder joint are many in number. Some of them are Rotator cuff diseases, Glenohumeral disorders, Acromion clavicular joint disorders, and Referred pain. Frozen Shoulder comes under Glenohumeral disorders. It is also known as Peri arthritis or Adhesive Capsulitis. Stiffness along with pain is a symptom present in Frozen Shoulder<sup>2</sup>. The management in modern parlance is a functional approach to shoulder pain, including analgesic treatment, Steroid Therapy, Physiotherapy, and Surgical release of the capsule<sup>3</sup>. The clinical manifestation of *apabahuka* is produced due to the morbidity of *vata dosha* alone or in the combination of *kapha* along with *vata*. Acharya *sushruta* has considered *Apabahuka* as a *Vataja vikara*. The vitiated *vata* causes the *shoshana* of *amsa bandhana* and *sankocha* of *sira* and *kandara* of the *amsa pradasha* leading to *Bahupraspandanahara* and *Sthambha*. The treatment is classified mainly into two types. They are *santarpana* and *apatarpana*<sup>4</sup>. Based on the cause of the disease, any one procedure among these can be adopted. Acharya *charaka* and *vagbhata* highlighted *Nasya* as

the effective line of treatment. *Samanya Vatavyadhi chikitsa* is the choice of treatment. In *Kevala vataja* and *Dhatukshayaja apabahuka*, the *samanya vataja chikitsa* are the choice of treatment<sup>5</sup>. Among the treatment modalities described in Ayurveda, *Samshodhana chikitsa* holds much importance. *Charaka* mentions *Nasya* under *samshodhana chikitsa*. *Nasya* is considered the prime modality of treatment in *Urdhwajatrugata Vikaras*, and it also nourishes the *Shiras*, *Skandha*, *Greeva*, and *Kaksha*. It has an important action in clearing the *dosha* which is deep-rooted in the channels of the head<sup>6</sup>. *Apabahuka* is one such clinical condition where *Nasya* has a very important role in management. The line of treatment of *Apabahuka* itself suggests the importance of *Nasya-karma* in its management. Since Pain and stiffness of the shoulder joint is the important symptom of *Apabahuka*, *vedanashamaka shamanaushadhi* containing many *vatahara dravyas* assumed to be beneficial. Hence this study is planned to ascertain the therapeutic efficacy of *Prasaarini taila Nasya* and oral administration of *Raasna Guggulu* as *shamana aushadi* in *Apabahuka*.

## AIMS AND OBJECTIVES

1. To review and analyse the literature of *Apabahuka*.
2. To evaluate the combined effect of *Prasaarini taila Nasya* and *Raasna Guggulu* in the management of *Apabahuka*.

## MATERIAL AND METHODS

### METHODOLOGY

### METHOD OF COLLECTION OF DATA

**Sample Size** – 30 patients fulfilling the diagnostic and inclusion criteria of *Apabahuka* for the study.

### DIAGNOSTIC CRITERIA

- Pain
- Stiffness
- Range of movements

## INCLUSION CRITERIA

- The patients between ages of 16 to 60 years are included in the study.
- Patients presented with *pratyatma lakshana* of *apabahuka*.
- Patients who are fit for *Sneha Nasya Karma*.

## EXCLUSION CRITERIA

- The patients having Fractures & Dislocation in the Shoulder region are excluded from the study as the line of management differs from the present line of management.
- Pain in the shoulder due to other systemic illnesses like Emphysema, Cardiac problems, Hemiplegia

## STUDY DESIGN

- It is a single-blind clinical study with a pre-test and post-test design. In this study 30 patients diagnosed as *Apabahuka* of either sex were subjected to clinical study.

## POSOLOGY

Nasya with *Prasaarini taila* (8 drops per nostril) for the initial 7 days along with that *Rasna guggulu* was given in a dose of 1 gm tid for 28days.

**Total Duration of the study:** 28 days.

**INTERVENTION: Treatment procedure of Nasya.**

### Sambhara Samgraha

A cotton pad, gauze, and lotus petals to protect eyes while swedana were made available. For swedana arrangement for nadiswedana (pressure cooker without weight, long heat-resistant flexible pipe) was made. Gokarna, Warm water for kavala, Haridra churna dhoomavarthi, and disposable sterile plastic containers for spitting (preferably transparent) were made available.

### Purva karma

The Patient was advised to wash the face and mouth with lukewarm water. Abhyanga was done over shiras, lalata, kapala, greeva and skanda. Nadisweda was done followed by abhyanga over palm and sole. Eyes were bandaged with a clean gauze piece after placing lotus petals and a cotton pad over closed eyelids while doing the swedana. The patient was made to lie in a supine position with

slightly elevated legs and head extended backwards.

### Pradhana karma

The medicine was mildly warmed over a water bath. The prescribed dose of medicine was taken in the Gokarna and poured into either nostril closing the other in a continuous single stream. Immediately after the instillation of medicine, mild massage was done over pani, pada, greeva, and skanda. The patient was asked to inhale the medicine with moderate force and to spit it through their mouth turning their head to either side alternatively without rising from the cot. The patient was made to lie in the same position for 100 matrakala (3-5 minutes)

### Pashchat karma

Dhoomapana was done with Haridra churna followed by Kavala with warm water to attain kanthashudhi. The patient was advised not to take any type of food or drink for two hours after nasya.

## ASSESSMENT CRITERIA

- The cardinal clinical manifestations, both subjective symptoms as well as objective signs of *Apabahuka* scored according to the severity and were considered as the assessment criteria for the study.
- The Functional assessment & pain of the shoulder joint is done according to the parameters of Constant and Murley where the points are converted into grades for the convenience of the study. Finally, it is interpreted as the higher the score better the shoulder functionality.

## SUBJECTIVE PARAMETERS

- Pain
- Stiffness

## OBJECTIVE PARAMETERS

- Range of movements

**INVESTIGATIONS** Hb%, TC, DC, ESR, RBS, Radiological findings, RA Factor (Wherever necessary).

## STASTICAL ANALYSIS

For the statistical analysis, the data obtained in both groups were recorded and presented in tables, diagrams, and graphs. The following statistical tests are used for the assessment of parameters:

- Assessment of parameters within the group (after treatment and after following up) – Wilcoxon sign rank test.

The corresponding p-value was noted and obtained results were interpreted as follows:

- For p-value > 0.05 – interpreted as no significant.

- For p-value < 0.05 – interpreted as significant.

### OBSERVATIONS AND RESULTS

The observations give a detailed descriptive statistical analysis of all 40 patients suffering from *Apabahuka* according to their Age, Sex, Religion, Education, Socioeconomic status, Marital status, Occupation, *Ahara, Prakrithi, and Lakshanas.*

### RESULTS

**Table 01: Statistical analysis of Subjective and Objective parameters**

	Mean score				%	S.D (±)	S.E (±)	Wilcoxon Z	p-value
	BT			BT-AT					
Pain	6.07	AT	3.30	2.77	45.60	1.073	0.199	9.88	<0.05
		AF	1.80	4.27	70.33	1.311	0.244	15.19	<0.05
Stiffness	1.97	AT	1.03	0.93	47.46	0.450	0.084	7.97	<0.05
		AF	0.47	1.50	76.27	0.630	0.117	10.91	<0.05
Range of Movements	2.03	AT	1.63	0.40	19.67	0.498	0.093	2.52	<0.05
		AF	0.80	1.23	60.66	0.626	0.116	8.18	<0.05

**Table 02: Overall effect of treatment**

OVERALL EFFECT OF TREATMENT		
Grading	Relief in Percentage	Relief in Patients
No Improvement	0%	0
Mild Improvement	1-30 %	0
Moderate Improvement	31 – 60%	6
Marked Improvement	61 – 99 %	22
Complete Remission	100%	2

In the Overall effect of treatment in *Apabahuka*, out of 30 patients in this study, 6 patients (20%) were getting Moderate, 22 patients (73%) were getting

Marked improvement and 2 patients (7%) were getting Complete Remission

**Table 03: Overall Effect of Treatment**

BT	AT	SD	SE	T Value	P Value
3.36	1.02	0.561	0.104	18.26	<0.05

The overall effect of treatment and statistical analysis showed that the mean score which was 3.36 before treatment was reduced to 1.02 in follow-up, and there is a statistically significant change. (P<0.05)

### DISCUSSION

#### Discussion on Disease:

*Apabahuka* is explained as one among the *Nanatmaja Vata Vyadhi* where there is *karmakshaya* of *Amsasandhi* and *bahu* present due to pain and stiffness in the affected part. The clinical manifestations like painful shoulder, stiffness and decreased range of movements characterize the illness *Apabahuka*.

From the overall view of etiology, it is obvious that the precise etiological factor is vata dosha but other doshas can also modify the clinical presentation in which kapha is the major one than the rest. Being a Vata vyadhi, the general principles of the treatment of Vatavyadhi are also applicable to Apabahuka. Snehana, Swedana. Depending on the samprapti involved i.e., Dhatukshayaja or margavarana the selection of treatment varies. Since it is a Vatakapha Vikara and Avarana is the resultant, Swedana would be an ideal line of treatment. In contemporary science, treatment is mainly aimed at Non-pharmacological methods and analgesics. Among Non-pharmacological treatments physical heat therapy is given importance. Apabahuka is characterized by joint pain and stiffness. The heat applied to the affected area helps in combating many of the symptoms. In this disease, Vata is the culprit, but Kapha is also having a significant role in the manifestation of the disease. So Swedana procedure is aimed at Kapha as well as Ama. Here comes the role of Rooksha Sweda. As per classics, apabahuka is not only mentioned in Vatavyadhyadhikar but narrated in Ama Vatadhikara also. Thus, the management of both holds good for apabahuka. Therefore, Kolakulathadi Choorna and busha choorna which are told in Vatavyadhi and Amavata contexts respectively are thought for Swedana, in the form of Pinda Sweda. As it is having the properties of both Vata and Kaphashamana Apabahuka is one of the Nanatmaja Vata Vikaras and is characterized by shoola and Sthabdhatta of the shoulder joint. Ample references about the diseases of Vata Pitta and Kapha are available in the literatures of Veda kala, but citations about the term Apabahuka are not present. A detailed description from Nidana to Chikitsa can be found in the literatures of Samhita kala and onwards.

The shoulder joint is known as Kaksha sandhi or Amsa sandhi which comes under the category of Bahucheshta sandhi and Samudga Sandhi. The Kapha dosha present in the sandhi helps lubrication the sandhi and aids in the movements like prasarana, and akunchana. Vitiating of Kapha along with Vatadosha

either qualitatively or quantitatively may lead to impairment in the range of movements. It is an articulation between the humerus and scapula and is also known as the Gleno-Humeral joint. It is a Synovial type of joint with a Ball and Socket type and a Polyaxial sub-type. The articulation of the humeral head with the glenoid cavity of the scapula forms the joint. The synovial membrane of the shoulder joint lines the inner surface of the fibrous capsule and protrudes through the opening in front of the capsule to communicate with the sub-scapular bursa and sometimes with the infra spinatus bursa behind the capsule.

The specific Nidana of Apabahuka is not separately mentioned. As it is a Vataja Nanatmaja vikara, the Nidana of Vatavyadhi in general is also considered the Nidana of Apabahuka. All the nidana may be subdivided into Aharaja, viharaja, agantuja, manasika etc. Indulgence of various etiological factors leads to the accumulation of the vata dosha in the Amsa Pradesh and causes the shoshana of the Amsa bandhana or siraakunchana, which in turn leads to the manifestation of Kevala vataja Apabahuka. Further kshaya of the dhatu causes the prakopa of the vata and then leads to the amsa shosha. This unique pathology is described as dhatukshayajanya Apabahuka. Sometimes due to Kaphakara nidana, the kapha gets aggravated in the sandhi which impedes the chalguna of the vata leading to the occurrence of apabahuka. This distinct pathology is referred to as kapha samsargaja apabahuka. Poorva roopa can be taken as minor symptoms of disease produced before the actual manifestation of the disease. In Apabahuka vague shoulder pain, mild stiffness in the upper extremities, mild restricted movements, and similar other symptoms in its minimal severity may be considered Poorva roopa. Due to the specific nidana, there will be vitiation of Vayu. This Vitiating Vayu gets accumulated in the Amsa Sandhi and further afflicts the Sira, Kandara, Snayu, Rakta, Mamsa, Meda, and Asthi Dhatu involving the respective Srotas and produces the Shoola in Amsa and Bahucheshta Pradesh with Bahucheshta Pradeshahara. Though Apabahuka is characterized by restricted movements of the shoulder joint, stiffness, and pain, it may be difficult to make a dif-

ferential diagnosis between the conditions like Amsashosha, Vishwachi, and Ekangavata. The differentiation between these disorders can be made easily by analyzing the site of the disease, course of pain, the character of pain, severity, associated conditions, and functional disability in patients. The treatment is classified mainly into two types viz: *santarpana* and *apatarpana*. In *Apabahuka* either procedure is indicated based on the cause of the disease. *Rooksha Pinda sweda* is a type of *apatarpana chikitsa*. This type of *apatarpana* treatment is helpful in *kapha samsargaja apabahuka*. In *Kevala Vataja* and *Dhatukshayajanya Apabahuka*, the *Samanya Vatavyadhi Chikitsa* like *Snehana*, *Swedana*, *Abhyanga*, *Basti*, etc. is the choice of treatment.

#### **Discussion on karma review:**

A scientific explanation of the concept of the administration of drugs through the nasal route has been well practiced by Acharyas. Now it has been practiced by modern physicians for at least the last 20 years. Modern medicine science has accomplished advances in the administration of drugs through the nasal route by inhalation of vaporized, nebulized, powdered, or aerosolized drugs, as well as by direct instillation. To understand the relevancy of the mode of mechanism/action of Nasya, a gross understanding of the relative anatomy of the nasal cavity is very important. There are three stages of Nasya karma: 1) Poorvakarma 2) Pradhankarma 3) Paschatakarma. The importance of the Poorvakarma in Nasya karma is to facilitate drug absorption through nasal neurons and paranasal sinuses. In this, local abhyanga and Swedana cause an impact on blood circulation to the head. The vasodilatation action over the superficial surface of the face facilitates drug absorption. The second aspect of Poorva karma; the posture given during the Nasya karma has its relevancy in two ways: 1) It creates patency in channels of the nasal cavity and Naso-pharynx. 2) The drug administered, reaches the upper part of the nasal cavity and stimulates the olfactory neurons. The provision created by Poorva karma helps in the Pradhana karma by providing sufficient time for the stimulation of olfactory neurons. During this explanation, classics have men-

tioned one more structure; the Shringataka Marma where there is an association of Ghrana(nasal), Akshi(visual), Shrotra(auditory), and Jiwha(lingual) Siras (nerves and vessels) are present. Indu the commentator for Ayurvedic epics, mentioned the exact sthana of the Shringataka Marma (i.e., Shiraso Antar madhya Murdha) which can be considered for the middle Cephalic Fossa. The Middle Cephalic Fossa is the region, which, in connection with ethmoid and sphenoid sinuses, consists of meningeal vessels, mainly the internal carotid artery, cranial nerves (3rd,4th,5th, and 6th), and also the optic nerve. The pituitary gland can be approached through the sphenoidal sinus by trans antral and trans nasal routes. The sphenoidal sinus is inferiorly in connection with the Nasopharynx and posteriorly with the brain stem. The above shows the Shringataka Marma (structure consisting of four siras in connection with four sense organs and the nerves and vessels) can be related to the Middle Cephalic Fossa. The absorption of the drug is also facilitated by the Paschat karma followed during the procedure. After administration of the drug, when the drug reaches the distal ends of air way, the patient is asked for Nisthivan Kriya (spitting out the medicine). The medicine should reach both sides of the throat; otherwise, the drug absorption doesn't occur in the siras properly.

#### **DISCUSSION ON RESULTS:**

**Effect on Pain:** Statistical analysis showed that the mean score, which was 6.07 before treatment, was reduced to 3.30 after treatment and reduced to 1.80 after following up with a 70.33% improvement, and there is a statistically significant change. ( $P < 0.05$ ).

**Effect on Stiffness:** Statistical analysis showed that the mean score, which was 1.97 before treatment, was reduced to 1.03 after treatment and reduced to 0.47 after following up with a 76.27% improvement, and there is a statistically significant change. ( $P < 0.05$ ).

**Effect on Range of Movements:** Statistical analysis showed that the mean score, which was 2.03 before treatment, was reduced to 1.63 after treatment and reduced to 0.80 after following up with a 60.66% im-

provement, and there is a statistically significant change. ( $P < 0.05$ ).

**The overall effect of treatment:** In Overall effect of treatment in *Apabahuka*, out of 30 patients in this study, 6 patients (20%) were getting Moderate, 22 patients (73%) were getting Marked improvement and 2 patients (7%) were getting Complete Remission. The overall effect of treatment and statistical analysis showed that the mean score which was 3.36 before treatment was reduced to 1.02 in follow-up, and there is a statistically significant change. ( $P < 0.05$ )

## CONCLUSION

It can be said that the present study shows significant remission in signs and symptoms of the illness *Apabahuka*. Therefore, it is imperative that the selected medicines help in the management of the disease. *Apabahuka* mostly affects individuals between the age of 16 to 70 years. Sex, marital status, religion, social status, and literature bear no relation to the causation of this disease. Morbidity of *Vayu* is the prime pathology of the *Apabahuka*. This morbidity can happen either due to *Dhatukhsaya* or *Kapha Avarana*. Morbid *Vata Dosha* invariably involves the *sira, snayu, kandara, mamsa, and asthi dhatu* at the shoulder joint. *Apabahuka* as a whole cannot be compared to any single disease pathology in modern parlance. But whatever may be the disease, it affects the well-being of the person and makes an impact on the nation's economy. *Nasya* with *Prasaarini taila* helps to pacify the *Vataprakopa* due to its *Snehana*

and *brimhana* qualities. On the same hand, *Rasna Guggulu* also helps to relieve the symptoms like *Shoola, and Sthambha* and by the way improves functional ability. The appraisal of symptoms before and after the treatment that incorporated pain in the shoulder stiffness, and restricted movements in the affected part showed unambiguous cutback in severity. Moreover, the improvement following the treatment proved to be statistically significant. Thus, this dissertation work is presented with the trust that the observations and results may strengthen the scope of further research advancement in this aspect of *Ayurvedic* medicine, for the betterment of mankind.

## REFERENCES

1. Shabdakalpadruma by Radhakanta deva vol 2, Naga publishers, Delhi, Edition 2002: pp 348.
2. Shabdakalpadruma by Radhakanta deva vol 2, Naga publishers, Delhi, Edition 2002: pp 349.
3. Charaka Samhita of Agnivesha, Pandit Kashinath Shastri, Vol 2, Vidyotini Hindi Commentary, Chaukambha Sanskrit Sansthan, Varanasi, Edition 2009: pp 700
4. Madhava Nidana-Vijaya Rakshita Commentary Vol 1, Chaukambha Sanskrit sansthan Varanasi, Edition 2002: pp584.
5. Sushruta Samhita Nibandha Sangraha by Dhalana, Chaukambha Sanskrit Sansthan, Varanasi, Edition 2009: pp 268
6. Sharangdhara Samhita By Shri Dayashankar Pandey Chaukambha Amarbharati Prakashan, Varanasi, 7th Edition: pp 100.

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