



The Comparative Clinical Study to Evaluate the Effect of Vatada Taila Nasya and Swalpamasha Taila Nasya in Management of Apabahuka (Frozen Shoulder).

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ABSTRACT

The majority of diseases in today's fast-developing era may not be life threatening, but they interfere with daily living and reduce human productivity. Apabahuka is one among those disease which is painful and badly affect the routine domestic activities of patients like combing, bathing etc....

Apabahuka is one among those VataVyadhi which result in karma kshaya of bahu in which the prakupita vata dosha enters the bahu pradesha where there will be khavaigunya does the sankocha of the sira, snayu and kandara leading to lakshana such as bahu shoola, stamba, bahupraspanditahara. Nasya Karma is one of the prime treatments of Avabahuka, especially Brumhana Nasya. Drug administered through nose nourishes the Shiras, Greeva and Vaksha. As Apabahuka is caused by purely VataDosha and Shoshana of SleshakaKapha. Hence VataShaman, Sleshaka Kapha Poshana should be aim of Samprapti Vighatana towards the cure of disease. Vatada Taila and Swalpamasha Taila. are Vatahara and Brumhana in nature. Hence present study is undertaken as a comparative clinical trial to know the effect of Vatada Taila Nasya and Swalpamasha Taila Nasya.

INTRODUCTION

A healthy life has been cherished wish of man since ages, but nowadays due to fast developing technological era, sedentary lifestyle and lack of time, people cannot concentrate on their proper regimen. Due to the advancement in life style people undergo many unwanted practices like faulty dietary habits, improper sitting posture, continuous work in one posture and overexertion, load bearing movements during travelling and sports. All these factors result in manifestation of many diseases. As of now, most of the disease may not be life threatening but will hamper day to day life and human productivity.

Avabahuka is one among those diseases which is Painful and affects the normal routine life style of an individual. It's one among the Vata Vyadhi which affects normal functioning of upper limbs. Vata is considered as a chief factor for physiological maintenance of body. The impairment of these factor leads to severe pathological conditions therefore Vataja Vyadhi is given utmost important than Vyadhis produced by other two Doshas.

In Apabahuka Prakupita Vata Dosha localizing around Amsa Pradesha and thereby causing Shoshana of AmsaBandha as well as Akunchana of Sira. At this site leading to symptoms like Bahupraspandita Hara. Amsa Shosha can be considered as a preliminary stage of disease where dryness of Sleshaka Kapha from shoulder joint occur. In the next stage due to loss of Sleshaka Kapha symptoms like Shoola(pain) during movement, Amsa Sihabdhatha(Stiffness in shoulder joint) gets manifested. Hence it can be correlated with Frozen shoulder in Allopathy system of medicine.

The Frozen shoulder, medically referred to as Adhesive capsulitis, is a disorder in which shoulder capsule, connective tissue surrounding the glenohumeral joint of the shoulder, becomes inflamed and stiff greatly restricting the motion causing chronic pain. Self-reported prevalence of shoulder pain is estimated between 16 to 26% of general population. It's the 3rd most common cause of musculoskeletal consultation in primary care. Most common in 5th and 6th decades of life with the peak age in mid-50's. Women are more affected than men.

Modern treatments for Frozen Shoulder will be analgesics and intra articular injection of corticosteroids into shoulder joint. These approaches only give a temporary relief but not a permanent relief of pain, long term use of these medicines would lead to adverse effects on the body.

Acharya's have mentioned Nasya as one among the important procedure of Panchakarma which is indicated in Apabahuka, especially BrumhanaNasya. Drug administered through nose nourishes the Shiras, Greeva and Vaksha. Ayurveda clearly mentioned that Apabahuka is caused by purely Vata Dosha and Shoshana of Sleshaka Kapha. Hence Vata Shaman, Sleshaka Kapha Poshana should be aim of SampraptiVighatana towards the cure of disease.

Vatada Taila and Swalpamasha Taila are Vatahara and Brumhana in nature. Hence present study is undertaken as a comparative clinical trial to know the effect of Vatada Taila Nasya and Swalpamasha Taila Nasya.

AIMS AND OBJECTIVES

1. To evaluate the comparative effect of *Vatada Taila Nasya* and *Swalpamasha Taila Nasya*.

MATERIALS AND METHODS

The aim of this study was to find out the effect of the *Nasya karma* in *Apabahuka* with *Vatada Taila* and *Swalpamasha Taila* to compare their efficacy. Therefore, two groups were made and the result obtained in both the individual group was compared.

THE MATERIAL USED FOR THE STUDY

1. *Vatada Taila:*

Contents of *Vatada Taila* are: *Vatada beeja taila*

Vatada taila was used for the study for *Nasya karma* is extracted from *vatada beeja* and it is market sample.

2. *Svalpamasha Taila:*

Contents Of *SvaplaMasha Taila* are:

- a. *Masha*
- b. *Saindava Lavana*
- c. *Tila Taila*

Method of Preparation of *Murchita Tila Taila*.

Taila will be prepared according to *Madhayama Taila Paaka Vidhi* mentioned by Ayurvedic classics. (*Sharangadhara Samhiha*)

For this 2-liters oil should be kept in vessel and heated on mild fire till it's forth disappearing and allow it to cool.

Now added the paste of *Manjistha* (150gm)

Then added the *Haridra, Lodhra, Nagara, Mustha, Amalaki, Vibhitaki, Ketakipushpa* each 50 gm then add 32 Liters of water.

Method of preparation of *Svalpa masha taila:*

Whole grain of *Masha* 4 kg was taken and crushed in to paste, added with 16 Liters of water Boiled on *mandagni*, reduced to (4 L) *kashaya* is prepared. 2 Liters of *Tila Taila* is added to above mentioned *kashaya* kept on *Mandagni*. 1 kg of *kalka* prepared with *saindava lavana*. Prepared according to *Taila Paka*. For *Nasya mrudupaka*.

SOURCE OF DATA:

40 Patients with classical features of *Avabahuka* were selected randomly from OPD / IPD of Panchakarma Dept. Of S.J.G Ayurvedic Medical College and Hospital, KOPPAL. Irrespective of their sex, occupation and socio-economic status.

SAMPLE SIZE & GROUPING

A minimum of 40 Patients equally distributed in each group.

Group A -The patients of this group are subjected to *Nasya* with *Vatada Taila* for 7 days.

Group B – The patients of this group are subjected to *Nasya* with *Svalpamasha Taila* for 7 days.

SELECTION CRITERIA: The cases were selected strictly as per the pre-set inclusion and exclusion of criteria.

DIAGNOSTIC CRITERIA: Based on classical signs and symptoms as per the case Proforma attached in Annexure I. Patients having the symptoms of *Apabahuka* disease like *Amsashoola, Stamba and Bahupraspanditahara* is selected.

Inclusion criteria:

- Patient presenting with classical signs and symptoms of *Apabahuka* (Frozen shoulder).
- Patients between the age group of 20-70 years of either sex.

- Patients fit for *Nasya*.

Exclusion criteria:

- Patient of shoulder joint dislocation or fracture and trauma.
- Patients with systemic disorders which interfere with the course of the treatment.
- Pregnant and lactating women.
- **Table no. 20: Duration of study**

Duration of the study		
Group A (<i>Nasya</i> group):	Treatment duration	7days
	Follow up	14 days
	Total study duration	21days
Group B (<i>Nasya</i> group):	Treatment duration	7days
	Follow up	14 days
	Total study duration	21days

Table no. 21: RESEARCH DESIGN

Selected 40 patients of *Apabahuka* (Frozen shoulder) were randomly divided into two groups as, Group A and Group B.

	Group a: <i>Nasya</i>	Group b: <i>Nasya</i>
<i>PURVAKARMA</i>	<i>Sthanika Abhyanga of UrdhwajatrugataBhaga with Tila taila and Bashpa Swedana</i>	
<i>PRADHANAKARMA</i>	<i>Nasya Karma with Vatada taila.</i> Dose-8bindu/nostril for 7 days.	<i>Nasya Karma with Swalpa masha taila.</i> Dose-8bindu/nostril for 7 days
<i>Paschatkarma</i>	<i>Dhumapana and Kavalagraha with Sukoshmajala.</i>	

SUBJECTIVE PARAMETERS

This was evaluated by Subjective Parameters mainly based on critical observation and by giving grading as follows.

Subjective Parameters

Shula:

Stambha:

Flexion:

Abduction:

Adduction:

Internal rotation:

External rotation:

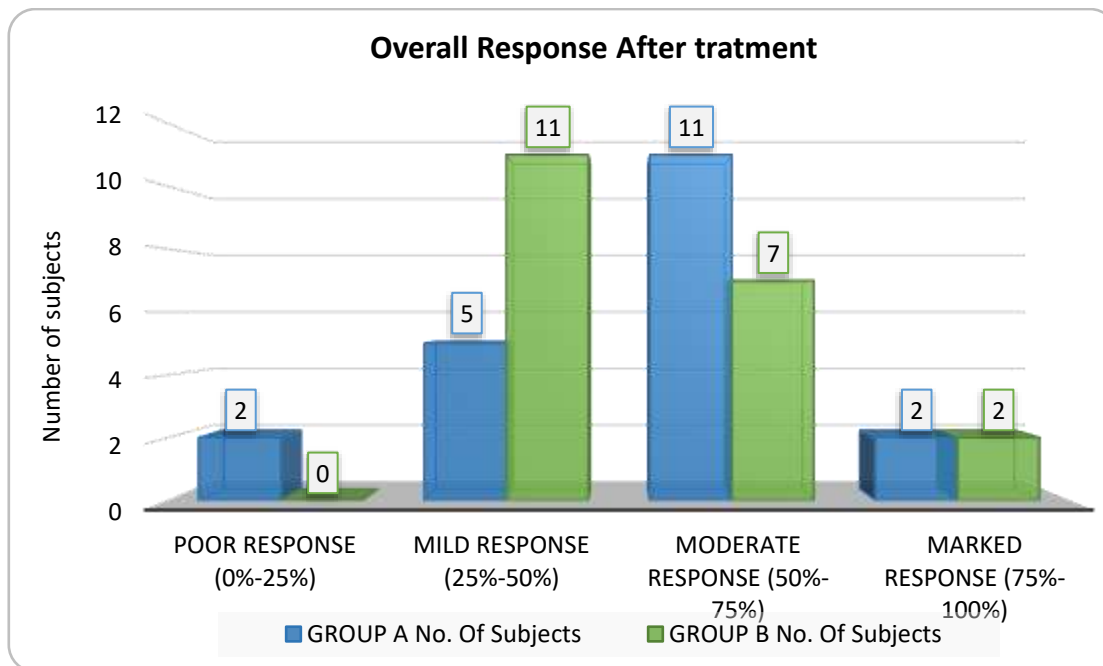
STATISTICAL ANALYSIS

Data were collected from sample before, after and post follows up treatment. Statistically Analysed by using Willcoxon Signed Rank Test and Man Whitney U Test.

Over All Response of The Treatment.

Overall Response After Treatment				
Response	GROUP A		GROUP B	
	No. Of Subjects	%	No. Of Subjects	%
Poor Response (0%-25%)	2	10%	0	0%
Mild Response (25%-50%)	5	25%	11	55%
Moderate Response (50%-75%)	11	55%	7	35%
Marked Response (75%-100%)	2	10%	2	10%
Total	20	100%	20	100%

Overall Response After Treatment.

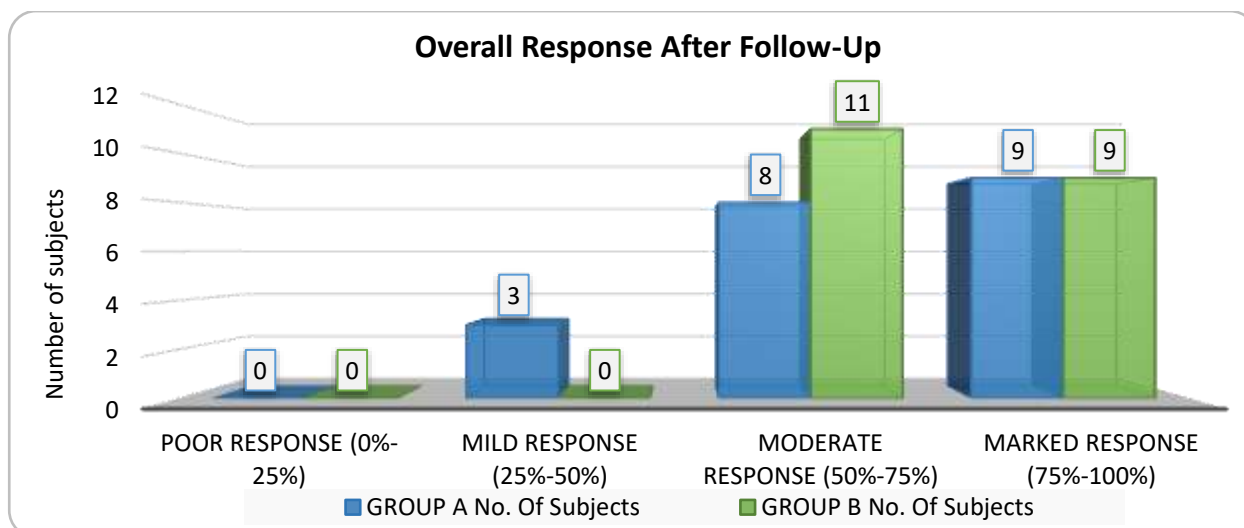


After Treatment: In Group A among 20 patients, 2(10%) patients showed poor response, 5(25%) patients showed mild response, 11(55%) patients showed moderate response and 2(10%) patient showed marked response. In Group B among 20 patients, 0(0%) patients showed poor, 11(55%) patients showed mild response, 7(35%) patients showed moderate response, 2(10%) patient showed marked response.

Over All Response of The After Follow up.

Overall Response After Follow-Up				
Response	GROUP A		GROUP B	
	No. Of Subjects	%	No. Of Subjects	%
Poor Response (0%-25%)	0	0%	0	0%
Mild Response (25%-50%)	3	15%	0	0%
Moderate Response (50%-75%)	8	40%	11	55%
Marked Response (75%-100%)	9	45%	9	45%
Total	20	100%	20	100%

Overall Response After Follow-Up.



After-Follow Up: In Group A among 20 patients, 0(0%) patients showed poor response, 3(15%) patients showed mild response, 8(40%) patients showed moderate response and 9(45%) patient showed marked response. In Group B among 20 patients, 0(0%) patients showed poor, 0(0%) patients showed mild response, 11(55%) patients showed moderate response, 9(45%) patient showed marked response.

Statistically by comparing between groups, both groups are equally significant that means there is no significant difference between both groups i.e., non-significant.

H₀ Proved: *Vatada taila Nasya* and *Swalpamasha Taila Nasya* equally effective in *Apabahuka*.

DISCUSSION

Any hypothesis or principle that needs to be proven must be thoroughly explored from all angles, as *Acharya Charaka* very clearly stated very long ago. After a hypothesis, it must be examined and tested using a variety of techniques before findings may be discovered. All of them should be conclusively backed by sound logic or reasoning. If the justification offered is convincing, the hypothesis is accepted as a principle; otherwise, it is left alone. The following headings serve as the foundation for the discussion of this study.

- Discussion on *Apabahuka*
- Discussion on the materials and methods.
- Discussion on clinical study.
- Discussion on the entire patient's demographic data.
- Discussion on observations made on results.
- Probable mode of action of *Nasya* and both *Taila*.

DISCUSSION ON THE DISEASE APABAHUKA

Apabahuka has been described as one of the disorders caused by vitiated Vata, but it is not included under the eighty types of *Nanatmaja Vatavyadhi* mentioned by *Acharya charaka*. The clinical manifestations of *Apabahuka* are *Bahupraspandana hara*, *Sthambha* and *Shoola* of the *amsa pradesha*. *Apabahuka* mainly arises due to the vitiated *vyana vayu*. *Vyanavata* is responsible for all types of motor functions namely *prasarana*, *aakunchana*, *vinamana*. Shoulder joint is known as *kaksha sandhi* or *amsa sandhi*, which comes under category of *bahu chesta sandhi* and *samudga sandhi*.

All the aetiological factors of *Apabahuka* can be included as the *nidana* of *vata prakopa*. The *Nidana* leads to the vitiation of *vata*, which may lodge in the *bahu pradesha*, due to *khavaigunya*. By definition, *apabahuka* is a disease characterized by morbid *vata dosha* localizing around the *amsa pradesha* and thereby causing *shoshana* of *amsa bandha* as well as *akunchana* of *sira* at this site. The movement of the joints is performed by the *Slesaka Kapha* situated in the joint. The vitiated *Vata* diminishes this *Shleshaka Kapha*, which leads to restricted movement of the bahu or may produce severe pain on movement, which is the initial stage of *Apabahuka*. The vitiated *vata* causes the *dathukshaya* i.e., degeneration of the bones, which is the main factor found in the pathogenesis. Due to the impingement of the shoulder joint, the space between joint is reduced, which ultimately causes the pain and stiffness. shoulder joint is an articulation between humerus and scapula and also known as Glenohumeral joint. It is synovial type of joint in which Ball and Socket. The synovial membrane of the shoulder joint lines the inner surface of the fibrous capsule and protrudes through the opening in front of capsule to communicate with subscapular bursa and sometimes with infraspinatus bursa behind the capsule.

The clinical conditions described in Ayurvedic texts like *Ekanagavata*, *Vishwaachi*, *Sandhigata Vata*, *Manya Stambha* and *Griva Stambha* can also mimic this condition to some extent. So, it is important to differentiate *Apabahuka* from other conditions.

Apabahuka being a *vatavyadhi* the general treatment principle of *vatavyadhi* is also applicable to *Apabahuka* like *snehapana*, *swedana*, *upanaha*, *abhyanga*, *siravyadha*, *nasya*, *basti* & *agnikarma*. *Nasya* treatment is proved to be very efficacious in relieving the *urdhwajatrugata vikara*. From the treatment point of view *Nasya* has been given the highest importance for *Apabahuka*. *Acharya Sushrutha* has indicated *Snehana Nasya* in case of *Apabahuka*. *Acharya Vagbhata* explained *Bruhmana Nasya* has indicated for *urdhwajatrugata vikara*. various unctuous substances can be used for this, amongst them *Taila* is considered better for the treatment of *vata vyadhi*. *Nasya* with the *taila* which provides *snigdatwa* and *Bala* to the *bahu* is best here. *Swalpamasha Taila* has been described in *Chakradatta* in the treatment of *Apabahuka*. According to main Ayurvedic classics *Vatada taila* possess the properties such as *madhura rasa*, *ushna virya*, *Bruhmana* and *vatahara* properties. Hence these both *Taila* was selected for *Nasya* in the present study. where these *Taila* properties hold well in treating *Apabahuka*.

DISCUSSION ON MATERIALS AND METHODS

Drugs used in the trial work.

- ✓ *Vatada Taila* for *Nasya*

The *Vatada* explained in *Samhita*, having properties like *Snigdha*, *Guru Guna*, *Madhura Rasa*, *Ushna Virya* and *Vatahara*. Now- a- days single drug therapies are preferred because: - the non- availability of reliable & standardized drugs, their high cost & ambiguity in the identity of the ingredients used are few of the major problems encountered today in the utilization of compound drugs in Ayurveda.

Avabahuka is a disease caused by *kupita vata dosa* localizing around the *amsa pradesa* causing the *shosana* of *amsa sandhis*, thereby leading to *akunchana* of *sira* at that site and giving rise to *bahupraspandana harastwam*. In Ayurveda there are several medications as well as purificatory therapy (*shodhana*) and *rasayana* therapy (*posana/bruhmana*) are indicated in *vata* predominant diseases in general. As the disease is purely caused by affliction of *vayu* and the symptoms come due to the aggravation of *vayu* so *Vatanasak* therapy may be advocated as a remedy of the same. According to *Acharya Bagbhatta*, *bruhmaniya nasya* is indicated in *Avabahuka*. *Vatada* is a *Sneha dravya* and *Vruhmaniya dravya* having *guru*, *snigdha*, *sara*, *manda*, *drava* properties which are called as *posakaguna*, so *Vatada Taila* may pacify *Vata* by its *posaka* and *snehana guna*. As *Avabahuka* takes place in shoulder region (*amsasandhi*) so *Vyana vayu* is mainly responsible for the genesis of the disease. So *Nasyakarma* has been taken into consideration. Aggravated *vayu* dried up the *slesmak kapha* of *amsandhi* and leads to *Avabahuka*. In consideration *gunakarmayog snehanaguna* and *Nasyakarma* could pacify *Vata* by reducing *rukshaguna*. That is why this *Vatada* oil is chosen for the present study.

- ✓ *Swalpamasha Taila* for *Nasya*

The *Swalpamasha Taila* which is explained in *Chakradatta*, specially indicated in *Apabahuka*. The composition of this *Taila* includes *Murchita Tila Taila*, *Saindava Lavan* as *Kalka*, *Masha* as *Kashaya*. The composition of *kalka*, *Sneha* and *Drava Dravya* were taken in the proposition of 1:4:16 respectively as the general rule of *Taila Kalpana*, according to *Sharangadhara Samhita*.

- ✓ **Method**

Vatada taila and *Swalpamasha Taila - Bruhmana nasya* in the *matra* of *Ashta bindhu* in each nostril was administered. *Nasya* was scheduled for 7 days with follow up of gap of between 14 days.

DISCUSSION ON THE CLINICAL STUDY

The Patients were selected from OPD and IPD of S.J.G. Ayurvedic Medical Hospital, Koppal after considering the Inclusion and Exclusion criteria. Then they were randomly selected and treatment was administered. Totally 42 patients were registered for the study and two patients discontinued, 40 patients completed the treatment course.

After referring the literatures, *bahu shula*, *bahu praspanditahara*, *bahu stamba*, the Range of Moments of shoulder joint were fixed as the parameters for clinical assessment.

Nasya was administered in morning hours between 8AM to 11AM in empty stomach. The *Sthanika abhyanga* with *Murchita Tila Taila* and *mild Swedana* was performed as *Purvakarma*, as explained by all *Acharyas* and *Nasya* should be administered. The *Sthanika Abhyanga* was done to affected *bahu*, *Mukha*, *Kanta* with *Murchita Tila Taila* and *Mrudu Swedana* was performed. Then *Nasya* was administered in the dose of *Ashtabindhu* in both the nostrils in lying down position with head slightly raised for facilitating the proper administration of the drug to reach its target place. After administration of *Nasya*, light *Mardana* was done for *Mukha*, *Kanta Pradesha*, *Hasta*, *Pada*. Patient in lying position was asked to count up to 100 *M atra* i.e., approximately 2 minutes. The patient was asked to expel out the drug which comes in the throat. Care was taken that no portion of medicated oil is left behind. Medicated *Dhumpana* with *Haridra Varti* and *Kavala* with *Ushna Jala* were advocated to expel out the residual *kapha* lodged in *Kanta*.

Pathya which was advised to the patient during treatment period & *Pariharakala* viz Patients were advised to stay in a windless place. A light meal and lukewarm water were advised. One was advised to avoid dust, smoke, sunshine, head bath, anger, riding, excessive intake of fat and liquid diet. Patients were also advised to avoid day sleep and should not use cold water for any purpose like *Pana*, *Snana*, etc.

CONCLUSION

Based on the conceptual analysis and observations made in the clinical study the following conclusions can be drawn.

- ✓ *Avabahuka* is a disease caused by *kupita vata dosa* localizing around the *Amsa pradesa* causing the *soshana* of *amsasandhis*, thereby leading to *akunchana* of *sira* at that site and giving rise to *bahupraspandana haratwam*.
- ✓ Morbidity of *vyana vayu* is the prime pathology of the *Apabahuka*. Morbid *vata dosa* invariably involves the *sira*, *snayu*, *kandara*, *mamsa* and *asthi dhatu* at the shoulder joint leads to restricted range of movements, pain and stiffness of the shoulder joint.
- ✓ *Avabahuka* can be co-related to Frozen Shoulder based on the clinical features mentioned in classics.
- ✓ Gender, marital status, religion, social status, education is not relation with causation of this disease. Subjects of specific age and occupation are affected by this disease. Mostly Occupational and postural hazards are prone to *Avabahuka*.
- ✓ Management of *Apabahuka* with *Vatada taila* and *Swalpamasha Tail Nasya* are equal effective in the treating of the illness by virtue of its therapeutic effect by reducing symptoms of disease and improving the functional ability of the patients.
- ✓ *Nasya karma* is considered as very effective and easy procedure adopted in treatment of *Apabahuka*.
- ✓ Present study revealed that the *bharavahana*, *dukshashaya*, *rooksha*, *alpa ahara* and *abhigata* are the most occurring causes for the manifestation of disease *Apabahuka*.
- ✓ *Vatada Taila & Swalpamasha Taila* is beneficial in the form of *Nasya karma* in the management of *Apabahuka* due to its *Vatahara* and *Brumhana* properties.
- ✓ *Vatada Taila Nasya* and *Swalpamasha Taila Nasya* can be practiced safely without any adverse effect.
- ✓ We can give treatment in OPD level itself. So that it is convenient for the patient.
- ✓ The medicine and Procedure are cost-effective.
- ✓ Overall *Vatada Taila Nasya* (Group A) and *Swalpamasha Taila Nasya* (Group B) both are effective in almost all the parameters.
- ✓ H_0 Accepted: *Vatada Taila Nasya* and *Swalpamasha Taila Nasya* equally effective in *Apabahuka*.

Recommendations for further study

1. Further studies with larger samples will be beneficial to authenticate the results obtained in the present study.
2. Other modalities of treatment told in the classics in the management of *Apabahuka* like *uttarabaktika snehapana* can also be tried individually.
3. Long duration studies to be conducted with longer follow up period to assess the persistent effect of the procedures.
4. Physiotherapy can be carried out along with this study for better remission of the disease.

PROCEDURE PHOTOS





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