

**Research article****Role of *Laghu Vishgarbha Tail Amsabasti* and *Trayodashang Guggulu* in *Avabahuka* (Frozen Shoulder) – A Case Study**

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**Abstract:**

**Introduction:** In this spirited world pain is bothersome experience for everyone. If any part of body is having pain or stiffness then the person gets annoyed, prejudiced, and sometimes dejected. As pain makes life difficult, Avabahuka (Frozen Shoulder) is one of such condition due to which everyday life gets troubled. Amsa basti is an innovative procedure. Amsa basti was given by a Novel Instrument called Amsa Basti Yantra which was invented by me. **Case Report:** A Diagnosed case of Avabahuka; 55-year right-handed female patient with Right shoulder pain and restricted range of motion (ROM) visited outpatient department (OPD) of Kayachikitsa, at Datta Meghe Ayurved Medical College Hospital and Research Centre, Wanadongri, Nagpur (MS), The patient was given Laghu Vishagarbha tail Amsa Basti treatment sessions over the span of 3 weeks. Interventions included Trayodashang Guggulu [500 mg Thrice a day for 3 weeks]. Measures of the outcomes included Range of Motion (ROM) measurements, pain assessments. Following 3 weeks of Laghu Vishagarbha tail Amsa Basti therapy and Trayodashang Guggulu as shaman chikitsa, the patient established improved shoulder ROM and decreased pain. **Result:** After completing the aforementioned treatment plan, the patient was able to function at his previous level. She got moderately significant effect on pain, stiffness, flexion, extension and abduction after 21 days of treatment by Laghu Vishagarbha tail Amsa basti and oral therapy of Trayodashang Guggulu. **Conclusion:** Oral therapy with Trayodashang Guggulu and Laghu Vishagarbha tail Amsa Basti is a suitable combination of interventions in reducing all symptoms of Avabahuka (frozen shoulder).

**Keywords:** Avabahuka, Frozen Shoulder, Amsa Basti, Trayodashang Guggulu, Laghu Vishagarbha tail, Case Report

## 1. Introduction:

*Vata* (1) plays chief role in physiological maintenance of the body. *Vata* if gets disturbed or aggravated by various factors then it leads to various types of diseases which may be life threatening. So according to *Ayurveda* diseases produced by vitiated *Vata* are more important than diseases produced by other two *Doshas* i.e. *Kapha Dosha* and *Pitta Dosha*.

*Avabahuka* is caused mainly by vitiated *Vata*. *Avabahuka* is not mentioned in *Nanatmaj Vatavyadhi* but *Acharya Sushruta* and other *Acharyas* considered *Avabahuka* as *Vata vyadhi*. *Avabahuka* is the ailment which affects *Amsa sandhi*.

2% of the universal people are affected by frozen shoulder (2) with occurrence of 2.4/1000 person/year.

*Avabahuka* considerably reduces everyday living deeds, which has a negative bang on excellence of life and can result in long-standing or even lasting disability in some patients. Thus, the issue requires effective management.

*Amsa basti* is a cutting-edge technique. This treatment is used to manage *Vata Dosha* that has been vitiated due to an increase in its *Sheeta* characteristic. Transient Receptor Potential (TRP) Channels are the most effective way to comprehend the function of *Amsa basti*. The involvement of *Snehan-Swedana* at a time in pain management is made possible by the fact that Transient Receptor Potential Vanilloid -1 (TRPV1) channels are responsible for both the feeling of heat and pain (3,4) .

The attempt of this study is to evaluate the synergistic action of *Laghu Vishagarbha tail*(5) *Amsa basti* and oral drug therapy *Trayodashang Guggulu*(6) on *Avabahuka*.

## 2. Case Report

55-year-old female patient, worker at private company, visited on 10/06/2022 in OPD of Kayachikitsa (OPD No. 2206100006) at Mahatma Gandhi Ayurvedic College Hospital and Research Centre (MGACHRC)

Patient was asymptomatic Three years back. Then she got Right shoulder pain. The onset was insidious. She was unable to do regular work properly. She had taken non-steroidal anti-inflammatory drugs (NSAIDS) for 6 months but got no relief. Aggravating factors for the symptoms were Putting on Blouse and Sarree, Hairstyling, sleeping in any position at night – having to sleep intermittently in a chair, Reaching into cupboards

**H/o past illness:** No History of Diabetes Mellitus, No History of Hypertension, No History of accident, No History of trauma. **Treatment history:** Pain always gets subsided by taking analgesics. **Psychiatric history:** No abnormality Detected (NAD) **Surgical history:** Nothing specific. **Family history:** All family members are healthy. No family history of same complaints which the patient had. **Personal history:** Good Appetite, she takes tea – 4 -5 cups / day, not comfortable while watching TV and during sleep, uses 2-3 pillows while sleeping, Sleep gets disturbed due to pain.

**General examination:** Moderate Built, absence of Pallor, absence of Icterus, Absence of Cyanosis and Clubbing, Absence of Lymphadenopathy, Mild coated tongue, Pulse rate was 70/min, BP was 110/70 mm Hg, Respiratory rate was 17/min, Weakness in Right upper limb, 153 cm height, 62 kgs weight

**Systemic examination:** Respiratory System – No Abnormality Detected, Central Nervous System – No Abnormality Detected, Per Abdomen – No Abnormality Detected, Cardio vascular system – No Abnormality Detected

### ***Dashvidh pariksha:***

*Prakruti – Vatpradhan Kapha, Vikruti – Dosha – Vatpradhan and Dushya – Asthi, Mansa, Sara – Madhyama, Samhanama – Madhyama, Pramana – Madhyama, Satmya –Avikurut, Satva – Madhyama, Aharshakti – Madhyama, Vyayam shakti – Madhyama and Vaya – Vruddha*

### **Investigations:**

Hb – 12%, RBC – 4200, WBC – 6000, ESR – 12, Platelets – 224000, VDRL –Negative, X ray of Right Shoulder - Normal

### **Local examination**

**Palpation** - Tenderness was present on the right biceps tendon and coracoid process.

Angle of movement of Shoulder joint is measured by Goniometer. The major restrictions in range of motion [ROM] are abduction, Internal and external rotation. Functional internal and external rotation was decreased

**Table 1: Shoulder Range of Motion [ROM] -First Assessment**

Sr. No.	Movements	Right Shoulder [Angle measurement in °]	Left Shoulder [Angle measurement in °]
1	Flexion	150 <sup>0</sup> and pain	178 <sup>0</sup>
2	Extension	32 <sup>0</sup> and pain	56 <sup>0</sup>
3	Abduction	130 <sup>0</sup> and pain	175 <sup>0</sup>
4	Internal Rotation	46 <sup>0</sup> and pain	85 <sup>0</sup>
5	External rotation	50 <sup>0</sup> and pain	90 <sup>0</sup>

**Table 2: Intervention:**

Sr. No.	Intervention	Dose /day	Duration
1	<i>Amsabasti- LaghuVishgarbha tail</i>	250ml to 300ml	21 Days
2	Oral Drug- <i>Trayodashang Guggulu</i> with plain water	500 mg Thrice a day	21 Days

### ***Amsa basti Therapy:***

Patient was given *Amsa Basti* treatment in a room which was well-lit, ventilated clean, equipped with *Amsa Basti Yantra*, a treatment chair, proper disposal area for disposal of used oil and linen. The room temperature was between 25-29°C during treatment of a patient. *Amsa basti* treatment was given by *Amsa Basti Yanta* which was put on her right affected shoulder area. After that it was sealed by dough of *Urad dal* to avoid leakage of oil. Then 250 of *laghuvishagarbha tail* was poured in *Amsa Basti Yantra*. 250 – 300 ml of *laghuvishagarbha tail* was used for treatment for each session for 21 days. *Amsa Basti Yantra* is having top cap attached with Insulated Heating Device for Medicated Oil which is made in such a way that it is shock proof and safe to use in *Amsa basti* Treatment. Digital Temperature Sensor is also attached to top cap which communicates with the intelligent controller to inform the current temperature of treatment oil at frequent intervals. This *Amsa basti Yantra* is a novel apparatus in which Medicated Oil is kept over the affected shoulder joint area for a specified duration and intelligently maintains uniform temperature throughout the *Amsa basti* Treatment. The apparatus also allows automatic cut off

and notification on completion of the specified duration. In this way patient was treated for 21 days on an average a temperature of 40-45°C which was well tolerated by her. During the period of 25 to 30 minutes the temperature of oil was maintained automatically. After each session of Amsa basti treatment 5-10 minutes massage was given on affected area.

**Fig.1 and Fig.2: Patient taking Treatment of *Amsabasti* by *Amsa Basti Yanta***

**Fig.1**



**Fig.2**



## Result:

After 21 days of Treatment patient got relief in following Objective Parameters –

**Table 3: outcome of subjective parameters after Intervention:**

Sr. No.	Movements	Right Shoulder [Angle measurement in $^{\circ}$ ] First Assessment	1 <sup>st</sup> Week:	2 <sup>nd</sup> Week:	3 <sup>rd</sup> Week:
1	Flexion	150 <sup>0</sup> and pain	155 <sup>0</sup>	156 <sup>0</sup> , Mild Pain	160 <sup>0</sup> No Pain
2	Extension	32 <sup>0</sup> and pain	36 <sup>0</sup>	45 <sup>0</sup> No Pain	54 <sup>0</sup> No Pain
3	Abduction	130 <sup>0</sup> and pain	135 <sup>0</sup>	140 <sup>0</sup> No Pain	165 <sup>0</sup> No Pain
4	Internal Rotation	46 <sup>0</sup> and pain	52 <sup>0</sup>	54 <sup>0</sup> Mild Pain	60 <sup>0</sup> Mild Pain
5	External rotation	50 <sup>0</sup> and pain	53 <sup>0</sup>	54 <sup>0</sup> Mild Pain	59 <sup>0</sup> Mild Pain

Regarding Objective parameters, after intervention of *Amsabasti with LaghuVishgarbha tail* and Oral Drug treatment of *Trayodashang Guggulu* for 21 days shows significant improvement in flexion, extension and abduction. In Flexion angle of measurement is increased from 150<sup>0</sup> with pain to 156<sup>0</sup> with mild pain, In Extension angle of measurement is increased from 32<sup>0</sup> with pain to 54<sup>0</sup> without pain and Abduction angle of measurement is increased from 130<sup>0</sup> with pain to 165<sup>0</sup> without pain. Patient showed Moderate improvement in internal rotation and External rotation after 21 days treatment. Also patient showed significant improvement in Pain and Stiffness of Right shoulder joint after 21 days treatment.

### Discussion:

On the first day visit at our OPD patient was suffering from the *Avabahuka* (Frozen Shoulder) since three years. Patient was having Right shoulder pain and restricted movement [decreased range of motion (ROM)]. *Laghuvishagarbha tail Amsa Basti* and *Trayodashang guggulu* was given for 21 days. In addition to the *Deepana Pachana* capabilities of *Trayodashang Guggulu*, drugs like *Guggulu* and *Abha* resins contain *Rasayana* and *Balya* properties that heal damaged tissue, and *Rasna*, *Yavani* acts as *Vedana Sthapana* and *Vata Shamaka*. *Shothahara* is played by *Shunti* and *Daruharidra*. It strengthens the nerves, bones, joints, muscles, and ligaments. It is beneficial in all neurological and musculoskeletal illnesses. *Trayodasanga guggulu* has rejuvenating elements such as *shatavari*, *ashwagandha*, and *guduchi*, which provide vigour to tissues. *Shunti* and *Ajamoda* help to improve the digestive fire, whereas *Babbul* works on

*Asthidhatwagni*. Ghee, with its *Yogavahi* virtue, aids in the absorption and penetration of drugs. *Ajwain* and *Shatapushpa* practise *deepana*, *pachana*, *vatanulomana*, *vedanasthapana*, and *vatashamana* in the body. The most common drugs in *Laghu Vishagabha Tail* are *Ushnaveerya* and *Vatashamaka*. As a result, the combination produces a strong *Vatashamaka* effect. *Laghuvishagarbha Taila amsabasti* when administered directly to the skin, works by opening pores and increasing blood flow. Increased blood flow promotes faster nutrition delivery and healing, triggers vascular and neurological reactions that provide pain relief through counter-irritation effects. The herbs used in this *Tail* have deep penetrating actions that reach the dermal layers, soothing the nerves and cells beneath the skin and reducing pain. After 21 days of *Snehayukta Swedan* and Synergistic effect of *Laghu Vishagarbha tail Amsa Basti* therapy with Oral therapy of *Trayodashang Guggulu* patient established enhanced function, decreased pain, and better range of motion. She got moderately significant effect on pain, stiffness, flexion, extension and abduction after completion of treatment. Patient can do her routine work without taking NSAIDS.

### **Conclusion:**

She got moderately significant effect on pain, stiffness, flexion, extension and abduction after 21 days of treatment by *Laghu Vishagarbha tail Amsa basti* and oral therapy of *Trayodashang Guggulu*. Also, patient got mildly significant effect on external and Internal Rotation. After completing the aforementioned treatment plan, the patient was able to function at his previous level. In this way appreciable results were observed in the form of reduction of symptoms.

Oral therapy with *Trayodashang Guggulu* and *Laghu Vishagarbha tail Amsa Basti* is a suitable combination of interventions for those patients who are suffering with *Avabahuka* (frozen shoulder).

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### **Conflict of Interest:**

No conflict of interests



**Author Contributions:**

1. Dr. Sonali Wairagade – Study conception, design, data collection, analysis, interpretation of result and preparation of manuscript
2. Dr. Sadhana Misar (Wajpeyi) – discussion of result and contribution to final manuscript
3. Dr. Tanvi Wairagade. Dr. P.H. Hatwalne - discussion of result and contribution to final manuscript

**Ethics approval:**

The study has been approved by Institutional Ethical Committee.

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**Data availability:**

Data will be available with permission of Author

**Abbreviation:**

Outpatient Department (OPD), Range of Motion (ROM), Transient Receptor Potential (TRP), Transient Receptor Potential Vanilloid -1 (TRPV1)

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