

## REVIVING TRADITIONAL WISDOM IN MUSCULOSKELETAL DISORDERS: AYURVEDIC CASE MANAGEMENT OF AVABAHUKA W.S.R TO FROZEN SHOULDER

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### ABSTRACT

Musculoskeletal disorders significantly interfere with daily life, especially when associated with pain and restriction of movement. These conditions often limit an individual's ability to perform routine activities, leading to functional dependence, psychological distress, and reduced quality of life. Frozen shoulder (adhesive capsulitis) is a common musculoskeletal disorder affecting the *Amsa Sandhi* (shoulder joint), predominantly seen in individuals beyond middle age. Clinically, it presents with pain, stiffness, and progressive limitation of shoulder movements, making simple activities such as combing hair or wearing clothes difficult. The global prevalence of frozen shoulder is estimated to be approximately 2–5%. In Ayurveda, frozen shoulder can be correlated with *Avabahuka*. The present case study reports a 65-year-old female who presented to the Outpatient Department with complaints of bilateral shoulder pain and restricted movements for the past 6–

7 months. After detailed clinical evaluation, the patient was diagnosed as a case of *Avabahuka*. The treatment protocol included *Nasya* therapy followed by *Agnikarma*. Significant improvement in shoulder mobility and complete relief from pain were observed

within 15 days of treatment and confirmed during follow-up. This case suggests that combined Ayurvedic therapeutic modalities may be effective in managing *Avabahuka* and improving functional outcomes in frozen shoulder.

**KEYWORDS:** *Avabahuka*, Frozen Shoulder, *Nasya*, *Agnikarma*, Musculoskeletal Disorders.

## INTRODUCTION

*Avabahuka*, described under *Vatavyadhi*<sup>[1]</sup> is a disorder primarily affecting the *Amsa Sandhi* (shoulder joint). According to the classical Ayurvedic texts, *Avabahuka* is a *Vata*-predominant condition, sometimes associated with *Kapha*, and is characterized by pain (*Shoola*), stiffness (*Stambha*), *Bahupraspanditahara*<sup>[2]</sup> (restriction or loss of shoulder movements), diminished functional capacity, and in chronic cases, wasting of the regional musculature (*Bahusosha*).<sup>[3]</sup> The pathology involves *Vata prakopa* leading to *Sira-Snayu-Sandhi sankocha*, resulting in progressive restriction of joint mobility.

The clinical presentation of *Avabahuka* bears a striking resemblance to Frozen Shoulder or Adhesive Capsulitis as described in modern medicine. Frozen shoulder is defined as “a condition characterized by the gradual development of global limitation of active and passive shoulder motion, accompanied by pain, without a known intrinsic disorder of the shoulder”.<sup>[4]</sup> It predominantly affects middle-aged and elderly individuals, with a higher prevalence among women, and impacts approximately 2–5% of the global population.<sup>[5]</sup>

From a contemporary medical standpoint, management of frozen shoulder includes exercise therapy, physiotherapy, oral anti-inflammatory medications, intra-articular injections, and surgical intervention in resistant or prolonged cases. While these modalities are effective in providing symptomatic relief, they often focus on short-term management and may not address the underlying pathological mechanisms, leading to recurrence or incomplete recovery.

Ayurveda, with its holistic approach, emphasizes correction of the underlying *Dosha dushti* rather than mere symptomatic management. *Acharya Vagbhatta* has specifically advocated *Nasya Karma* and *Snehapana*<sup>[6]</sup> administered in increasing doses for the management of *Avabahuka*, aiming to pacify aggravated *Vata*, nourish *Snayu* and *Sandhi*, and restore normal joint function. Thus, Ayurvedic interventions offer a comprehensive therapeutic approach

with potential for sustained relief and functional restoration in *Avabahuka*, warranting systematic clinical evaluation.

In this study a female patient of 65 years age visited the Kayachikitsa OPD complaining of pain, stiffness and difficulty in movement of both arms since last 6-7months, *Nasya karma* followed by *Agnikarma* was done in the case and marked improvement was observed after completion of treatment with increased mobility and complete recession of pain in shoulder joint.

## MATERIALS AND METHODS

### CASE STUDY

A female patient aged 65 years came to Kayachikitsa OPD of I.P.G.A.E&R at S.V.S.P Hospital dated 21/05/25 complaining of

- severe pain in both shoulder
- trouble raising both hands and perform daily activities like tying a bun or changing clothes
- Duration: 6months

Patient was examined thoroughly and was diagnosed as a case of *Avabahuka* [Frozen Shoulder]. Patient was then planned for Panchakarma treatment.

Table 1	
<b>Mode of Onset</b>	Sudden
<b>Progress</b>	Gradually increasing
<b>H/O of present Illness</b>	Patient has taken OTC pain relieving drugs first two months providing temporary relief
<b>Aggravating Factors</b>	Carrying heavy objects, exposure to cold
<b>Relieving Factors</b>	Application of massage or sudation

Table 2	
<b>Personal History:</b> Appetite: Diminished Bowel: Irregular and Constipated Bladder: Regular, 5-6 times/day Sleep: Disturbed Addiction: Chewable Tobacco once a day Diet: Non-vegetarian	<b>General Examination</b> Pallor: Absent Jaundice: Absent Oedema: Absent Clubbing: NAD Blood Pressure: 140/90 mm of Hg Pulse: 75 beats/ min Respiratory Rate: 22/min Height: 5ft Weight: 63 kg

**Diagnostic Assessment:** After thorough examination Patient was diagnosed as a case of *Avabahuka* [Frozen Shoulder].

### Parameters

#### 1. Pain (NRS)

**Note:** NRS (Numeric Rating Scale)<sup>[7]</sup> for pain is a simple, widely used tool to assess pain intensity.

#### Numeric Rating Scale (NRS)

- The patient rates their pain on a **scale of 0–10**
  - **0** = No pain
  - **10** = Worst pain imaginable

#### Common interpretation

- **0** – No pain
- **1–3** – Mild pain
- **4–6** – Moderate pain
- **7–10** – Severe pain

#### 2. Range of motion

### Treatment Plan

After diagnosis of patient with proper assessment, patient was admitted in Indoor Department for *Nasya karma* [Nasal instillation of drugs] followed by *Agnikarma* [Diathermy] therapy.

Table 2		
Steps	Procedure	Duration
<b>Purvakarma</b>	<i>Mukha abhyanga</i> [Facial massage] was done with <i>Tila taila</i> [Sesame oil] for 5mins followed by <i>Vastra Swedana</i> [Fomentation] 5 minutes.	7 days <sup>[10]</sup>
<b>Pradhana Karma</b>	10 drops <sup>[8]</sup> of <i>Ksheerbala Taila</i> <sup>[9]</sup> was instilled into each nostril closing the other in a head lowered position.	
<b>Paschat karma</b>	<i>Mukha abhyanga</i> and <i>Swedana</i> was repeated. Patient was subjected to <i>Snigdha dhumpana</i> [medicated smoke inhalation] followed by <i>Kavala</i> [oral cavity rinse] with lukewarm water after 15minutes. <sup>[11]</sup>	
<b>Agnikarma</b>	<i>Agnikarma</i> was performed on alternate days using a <i>Pachalauha Shalaka</i> at specific points identified based on local tenderness and areas of stiffness around the shoulder region.	3 days

## RESULTS

The patient was admitted to the Indoor Department for 10 days, during which proper lifestyle modifications and dietary restrictions were followed. Upon completion of the therapy, the patient experienced significant relief from pain, improved range of motion, and enhanced ability to perform daily life activities with ease.

Table 3				
	BASELINE	ON TREATMENT	1 <sup>ST</sup> FOLLOW-UP	2 <sup>ND</sup> FOLLOW UP
Pain (NRS)	7.5	5	3	0
Range of motion (in degrees)	Left arm: 120 Right arm: 130	Left arm: 150 Right arm: 160	Left arm: 170 Right arm: 175	Left arm: 180 Right arm: 180
Stiffness	High stiffness	Moderate stiffness	Minimal stiffness	Resolved

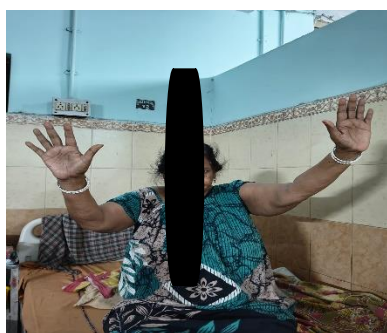


Fig: 1 [Before treatment]

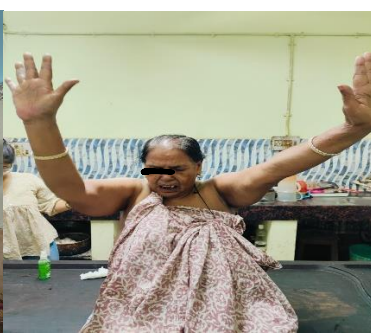


Fig: 2 [After nasya]



Fig: 3 [After Agnikarma]

## DISCUSSION

*Snehana* and *Swedana*: Tila Taila is identified in classical Ayurvedic literature as the *śreṣṭha taila* owing to its unique property of pacifying *Vata* without increasing *Kapha* (*vātaśamanam na ca śleṣmavardhanam*).<sup>[12]</sup> Its application through *Abhyanga* particularly benefits the *ūrdhvajatru pradeśa*, facilitating localized *Vata* alleviation, improved circulation, and effective analgesia.

Subsequent *Swedana* therapy potentiates this action. Classical references emphasize its capacity to soften even rigid substrates, illustrating its robust effect in reducing muscular stiffness and enhancing tissue pliability.<sup>[13]</sup>

The combined use of *Snehana* and *Swedana* forms a fundamental therapeutic strategy in Ayurveda, promoting enhanced transdermal absorption, accelerated physiological response,

and improved clinical outcomes. This synergistic approach thus plays a pivotal role in managing *Vata*-dominant musculoskeletal conditions.

**Ksheerbala Taila:** Prepared using *Bala* (*Sida cordifolia*), *Ksheera* (milk), and *Tila Taila* (sesame oil), is known for its *balya* (strength-promoting) and *Vāta-Kapha shamak* properties.<sup>[14]</sup> Its nourishing composition makes it especially effective in *Vātavyādhis*, where it supports tissue strength, mobility, and overall neuromuscular health.

**Nasya:** In Ayurveda, the nose (*nāsa*) is described as the gateway to the head (*śiras*).<sup>[15]</sup> Classical texts state that medicines administered intranasally reach the *Śṛṅgāṭaka marma*—a vital network of channels supplying the head and sensory organs. This facilitates the effective elimination of morbid *doṣas* from the *ūrdhvajatru pradeśa*.<sup>[16]</sup>

Although traditional literature does not explicitly detail the pharmacodynamics linking nasal administration to the brain, studies demonstrate that drugs delivered through the nasal cavity can enter the cerebrospinal fluid within seconds, indicating rapid absorption and swift therapeutic action through the intranasal route.

**Agnikarma:** *Agnikarma* provides rapid pain relief through controlled therapeutic heat. The application of a heated metallic *śalākā* induces localized vasodilation, improving blood flow, reducing stiffness, and enhancing joint mobility. Additionally, the thermal stimulus modulates pain receptors and accelerates metabolic activity in the affected tissues, making *Agnikarma* an effective intervention for *Vāta*-dominant musculoskeletal pain.

**Limitation of Study:** The mentioned study has been performed as a single case, large scale studies with higher number of cases can be more helpful in assessing efficacy of the treatment.

## CONCLUSION

The present study demonstrated significant clinical improvement in the management of *Avabahuka*, highlighting the strong therapeutic potential of a combined treatment approach for musculoskeletal conditions. The intervention yielded rapid and effective outcomes, suggesting that integrative therapies can offer enhanced relief compared to single-modality treatments.



Further large-scale and long-term studies are warranted to deepen our understanding of the mechanisms, benefits, and limitations of such multimodal strategies. Advancing this evidence base may ultimately strengthen clinical decision-making and open new avenues in Ayurvedic musculoskeletal care.

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