

# Management of Avabahuka (Frozen Shoulder)-A Case Study

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## ABSTRACT

Shoulder joint (Amsa Sandhi) has its clinical importance because of wide range of motion. Frozen shoulder is a musculoskeletal disorder characterized by stiffness and pain in the shoulder joint. This typically occurs in cycle of 3 stages, painful phase, stiff phase, and thawing phase. This entity is resembling with Avabahuka, in Ayurveda. Avabahuka is a disorder of Amsa sandhi, and it has been mentioned by Acharya Sushruta under 80 types of Vatavyadhis. It is commonest condition in orthopaedic hospital. Frozen shoulder causes pain and restricted movements, which hampers daily activity of the patient. Modern medicine has NSAIDs, steroids for such condition but it is costly, have much side effects and not satisfying Treatment. Siravedha is indicated for treatment purpose, but Suchivedhana was done which is one of the forms of Siravedha as it indicated where sira is not clearly visible. It is suggested commonly for instant pain relief (Sadyargruja Shamana), safe and cost effective. Hence, a case study was carried out using Suchivedhana karma and got significant results in minimal time and cost-effective management. Suchivedha is hidden treasure of Ayurveda.

**Key words:** Frozen shoulder, Avabahuka, Suchivedha

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## INTRODUCTION

In Modern era, Due to expansion of competitions, people suffer from lots of diseases, it is actually hampering daily routine. Frozen shoulder is one of entity to hampers daily activity. It is unknown aetiology disorder having pain and stiffness in the gleno- humeral joint. It is also known as peri-arthritis or adhesive capsulitis [1].

Incidence rate of this disease is 3-5% in general citizens. It increases up to 20% with diabetic patients. Next shoulder affected once first one has resolved in 6-17% patients. The non- dominant shoulder is more affected than dominant one [2]. Symptoms includes pain at nighttime initially, then all the time and limited movements of shoulder joint [3].

It is a consequence of thickening inflammation, scaring, thickening and shrinkage of the capsule around the normal shoulder joint. It is commonly seen in patients with risk factors of diabetes mellites, Chronic arthritis of shoulder joint, post- operative chest and breast surgery, long standing immobility of shoulder joint etc [4]. Various theories have been postulated in the pathology of this disease. According to De palma, bicipital tenosynovitis is the main cause, which starts following a strain injury and then it slowly proceeds to tendinous rotator cuff. Other theory of degenerative process of supraspinatus tendon

after injury or strain. The cuff becomes vascular, thick and infiltrated with lymphocytes and plasma cell due to vascular response to degenerative process. Gradually infra-articular inset of capsule becomes demolished by adhesions leading to frozen shoulder [5]. Treatments includes NSAIDS, hot fomentation, intra-articular injection, surgical procedure and physiotherapy [6].

Sometimes resistance of management occurs in Frozen shoulder. In that cases, resistant frozen shoulder can be considered for release of scar tissue by arthroscopic surgery or by manipulation of scarred shoulder under general anaesthesia. It brings risk of Humerus fracture [7]. We all very known about the side effects of NSAIDS and Steroids. They only provide temporary relief. It also required regular exercise of the shoulder joint to prevent the capsule from over tightening. It took regular follow ups of physiotherapist, which is time consuming and too costly.

In Ayurveda, this condition mimics with Avabahuka. This named because of it affects the Amsa Sandhi (Frozen shoulder). According to Acharya Sushruta, when Vata Dosh gets vitiated at Amsa Sandhi, it leads to exploitation and constriction of vessels. This condition is known as Avabahuka [8]. It is one of the 80 types of Vatarogas [9,10].

In Ayurveda, there are many methods for treatment of Avabahuka. eg. Siravedha, Agnikarma, Basti chikitsa, Nasya, Snehana, Swedana and oral medication.

Acharya Sushruta talked about the treatment of Avabahuka in Shareersthana. In this, they described Siravedha but in Chikitsasthan they excluded Siravedha for

Vatavyadhi treatment. So, there is squabble regarding the management. Hence, we used Suchivedha, modified form of Siravedha in Avabahuka [11]. Siravedha is Ardachikita means half part of treatment in Shalyatantra [12]. The aim of this study to find out effect of Suchivedha in this condition as well as to explore cost effective and quick relief treatment.

### Previous work done

- Vandana Anil Avhad evaluated the role of Viddha Karma in pain management of Musculo- skeletal disorders [13].
- Dr. Neha et al concluded that Suchivedhana is more effective than Snehana- Swedana in the management of Frozen shoulder [14].
- Dr. Amar P. Dwivedi et al reviewed the concept of pain management in Ayurveda [15].
- Dr. Pradnya P. Sabade and Dr. Rojee Sunil Parvatakar showed efficacy of Viddhagni Karma in the pain management of Calcaneal spur [16].
- Prof. Dalvi Kawthekar Prachi reviewed Clinical evaluation of Suchivedha (A type of Vyadhana Karma) in pain management [17].
- Dr. Dwivedi Amarprakash and Dr. Pradnya Chaugule evaluated A meticulous review on pain management through Ayurveda [18].

### Case study

A 45 years male patient, teacher by profession presented with complaints of pain, stiffness and limited movements left shoulder jointsince6 month. He had met with trauma by fall from bike 6and half month before. Initially he having pain only at night later on day time too. So, for this issue they consulted toshalya OPD at MGACH&RC, Sawangi (Meghe).

### History

Patient was K/C/O- DM for 3 years on treatment Tab. Glimstar OD &. No history of HTN, Koch's, surgical illness and drug allergy.

### Personal history

- Appetite-Good
- Diet-Mixed type
- Sleep-Reduced for 6 months
- Micturition-Normal
- Bowel-Normal
- Addiction-Not found
- Family history:
- Maternal-not specific
- Paternal-not specific
- Self- Married; 1 son 1 daughter-not specific

### General examination

- G.C.-Good
- Pulse-78/min

- B.P.-130/84 mm of hg
- Icterus-Not found
- Pallor-Not found
- Lymphadenopathy-Not found

### Systemic examination

- RS: AE=BE, Clear
- CVS: S1S2 normal, no abnormal sound added
- CNS- CNS- Conscious & Oriented
- P/A- Soft and non-tender

### Local examination

- Muscle tone: Normal
- Deformity Left shoulder joint- Absent
- Muscular atrophy- slight wasting
- Tenderness- Mild tender
- Local temperature- Normal
- Restriction of movements with severe pain
- Restriction range of Movements:
- Abduction- 600
- Flexion- 450
- Extension- 500
- Internal rotation: Severe pain with Dorsum of hand touching to L2 only

### Investigations

- Hb- 14.7gm%
- WBC- 6800/cu mm
- RBC- 4800 millions/mm3
- Bleeding time-1 min 35 sec
- Clotting time- 4 min 47 sec
- Blood sugar level (random)-115 mg/dl
- HbsAg-Non- Reactive
- HIV- Non- Reactive
- RA Factor-Normal
- ESR- 13 mm/hr
- X ray (AP) Left Shoulder joint- Normal

### Diagnosis

Left frozen shoulder.

### Management

Suchivedhana karma was done as per following.

### MATERIALS

### Procedure

In Purvakarma (Pre-Operative) Informed written consent was taken. 6 points on left shoulder was marked having more tenderness (Cephalic Vein at midpoint of arm). It sterile with Panchavalkalawath. This area was to be dried with the help of sterile gauze piece.

In Pradhana karma (Operative) by using Suchi (Sterile Disposable Needle No. 26), Viddhakarma was done on

the marked points in Ardha-Yava Matra (Depth 6-8 mm) [6,7].

Then local area cleaned, again with dry gauze in Paschata karma. Needle was discarded and no need of dressing needed.

### Duration

7 Settings were done, One per day, consecutively.

### OBSERVATIONS AND RESULTS

Results are mentioned in Table 1.

**Table 1: Avabahuka (frozen shoulder).**

Sr. No	Criteria	Before Treatment	After Treatment
1	Pain	Severe	Mild
2	Stiffness	Severe	Mild
3	Range of Rotation	45 degrees	170 degrees
4	Internal rotation	Severe pain with Dorsum of hand touching to L2 only	Mild pain with dorsum of hand touching to inter scapular region

### DISCUSSION

Pain arises when tissues are being damaged, and it causes the individual to expel the pain stimulus. Thus, pain is a subjective sensation. It is psychological adjunct to an imperative reflex. There are various types of pain e.g. Superficial/ Cutaneous pain, Deep pain, Visceral pain, Referred pain, psychosomatic pain etc. Pain receptors are also called as nociceptive receptors or nociceptors. The technique of receptor adaptation is fascinating in case of pain signals. Signal intensity can be imparted by using increasing number of parallel fibres. This is called as spatial summation. In case of Temporal summation, signal of expanding strengths is shifted by increasing the frequency of nerve impulses in each fibre [19]. Above mentioned pathology regarding pain must be demolished for treating the pain.

Suchivedhana includes pricking of the needle through skin, this mechanism can be compared with the action of Trans- Cutaneous- Electrical Nerve Stimulation and the procedure likewise. According to Acharya Vagbhata, two important factors arise in viatation of vata doshai.e.Dhatu Kshaya (degenerative pathology) and Avarana (Obstructive Pathology) [20,21]. Suchivedhana brings the viated dosha out of the body and removes the Avarana of vatadi dosha, hence it gives instant relief regarding with pain. Stiffness also reduced due to sampratibhanga of Avabahuka in next repeated settings. Due to demolish of obstruction, it provides healthy circulation around shoulder joint. Sira carries Vata, Pitta, Kapha and Rakta (Dosha) [22]. When we carry out Rakta (Blood) through any form of Raktamokshana, most viated Dosha are expelled out first. In Suchivedha, exact mechanism carried out by expelling very small amount blood. Though amount of blood is oozes is very low, but it may be adequate to expel out viated Doshas. Hence, result was obtained.

According to Chemical theory of pain, Endogenous opioid peptides (hormone) are produced by CNS and Pituitary gland. These are nothing but Endorphins, a short form of Endogenous morphine. Its main action is to restrict the flow of pain pathway. After Suchivedhana, these

endorphins are generated in the body, which inhibit the communication of pain signals. Hence pain decreases. Several studies on shoulder and other joint pathologies were reviewed.

The Suchivedhana is done over most tender points because these are the points of central fibres, which are further responsible for transmitting the pain impulse. In Avabahuka, we disturbed the channel which is responsible for production of pain.

### CONCLUSION

A single case study shows effectiveness of Suchivedhana in the management of Frozen shoulder without any internal medication and major surgical procedure. It is a simple and safe OPD level procedure with cost effectiveness. Especially it is instant pain relief. It causes no injury or minimal injury hence gives least adverse effects.

This technique is somewhat neglected by many Ayurvedic practitioners. It is required to explore this procedure in different kind of pain management.

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