

## “MANAGEMENT OF FROZEN SHOULDER WITH UPANAHA (POULTICE SUDATION)- A CASE STUDY”

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### ABSTRACT

Managing chronic disabling diseases is the main contribution of Ayurveda to the society. People mainly come in the shelter of Ayurveda when all other measures tried by them failed. More than 60% of total cases coming to Ayurvedic physician are of neuromuscular type having pain as main symptom. Pain, stiffness and restriction of range of movement are the complaint of every third patient coming to O.P.Ds. Before coming to Ayurveda mostly patient have been taken analgesics and even steroids (oral as well as intra-articular) for long duration, deranging their pain threshold and worsening the inflammation. Managing such conditions is really a hard task and when such conditions are worsens by the complicity of other dreaded diseases like diabetes, hypertension, stroke etc. then the condition is really challenging. In this paper one such case is discussed in which patient was distressed by the pain and restricting movements of joints so that performing even small daily tasks are impossible for her. Treatment of such painful condition without aid of any analgesic with simple bandaging of anti-inflammatory herbs is really appreciable. The paper also gives the details of method employed and material required for Upanaha Svedana.

**Key Words:** Panchakarma, Upanaha Svedana, anti-inflammatory, analgesic.

### INTRODUCTION

Frozen shoulder, medically referred to as adhesive capsulitis, is a disorder in which the shoulder capsule, the connective tissue surrounding the glenohumeral joint of the shoulder, becomes inflamed and stiff, greatly restricting motion and causing chronic pain<sup>1</sup>. The exact cause is unknown and this condition can last from five months to three years or more and is thought in some cases to be caused by injury or trauma to the area. It is believed that it may have an autoimmune component, with the body attacking healthy tissue in the capsule<sup>2</sup>. There is also a lack of fluid in the joint, further restricting movement.

Risk factors for frozen shoulder include diabetes, stroke, accidents, lung disease, connective tissue disorders, thyroid disease, and heart disease. The condition very rarely appears in people under 40. In frozen shoulder, there is a lack of synovial fluid, which normally helps the shoulder joint, a ball and socket joint, move by lubricating the gap between the humerus (upper arm bone) and the socket in the scapula (shoulder blade). The shoulder capsule thickens, swells, and tightens due to bands of scar tissue (adhesions) that have formed inside the capsule. As a result, there is less space in the joint for the humerus, making movement of the shoulder stiff and painful. This restricted space between the capsule and ball of the humerus distinguishes adhesive capsulitis from a less complicated, painful, stiff shoulder. The normal course of a frozen shoulder has been described as having three stages<sup>3</sup>:

- Stage one: The "freezing" or painful stage, which may last from six weeks to nine months, and in which the patient has a slow onset of pain. As the pain worsens, the shoulder loses motion.



- Stage two: The "frozen" or adhesive stage is marked by a slow improvement in pain but the stiffness remains. This stage generally lasts from four to nine months.
- Stage three: The "thawing" or recovery, when shoulder motion slowly returns toward normal. This generally lasts from 5 to 26 months.

Management of adhesive capsulitis by contemporary medicine mainly includes management of pain with analgesics and NSAIDs or sometime surgery is required. Mostly patients seek help of Ayurveda in such disabling chronic painful conditions with the hope of some miracle. Ayurveda is promising healing therapy being more beneficial for such patients in which oral medicaments cannot be given for long duration (in the present situation patient was suffering from diabetes and therefore long term use of analgesics and NSAIDs was harmful for her). On the basis of signs and symptoms this disease can be correlated with a disease described as Avabahuka in Ayurvedic texts. Avabahuka is a Vatakapaha dominated disease. Therefore Vatakapaha pacifying management was planned for the present case study.

### Case Report:

A female of age 56 year presented with bilateral pain and stiffness of shoulder joint along with severe restriction of upward elevation of shoulder joints. Both active as well as passive movements of upper limbs are restricted. Pain is constant in nature that become worst at night, and when the weather is colder; the patient is unable to perform even small tasks due to restricted upward movement of limbs. The patient is known case of Diabetes Mellitus type- 2 with uncontrolled sugar.

### History of Present illness:

There is no history of any trauma or physical injury. Onset is insidious starting with pain and stiffness that progress in severe restriction of shoulder joints movement.

### Clinical Examination:

#### Dashvidha Pariksha :-

- Prakriti : Vata Pittaja
- Vikriti : Tridoshaja
- Sara: Avara
- Samhana : Avara
- Ahara Shakti :

Abhyarana Shakti : Avara ( i.e. Digestion is poor)

Jarana Shakti : Avara ( i.e. assimilation is poor)

- Vyayam Shakti : Avara
- Vaya : Vridha
- Satva : Madhyam
- Satyama: Madhyam



- Bala : Avara

**Astavidha Pariksha :**

- Nadi : Vata Kapha (76/min)
- Jihva : Malavritta
- Mala: Niram
- Mutra: Bahumutrata
- Sabda: Samanya
- Sparsa : Samanya
- Drika : Samanya
- Akriti: Samanya

**Samprapti Vighatana:**

- Dosha: Tridosha (Vata dominated)
- Dushya: Ras, Rakta, Mamsa, Meda, Majja, Sukra, Oja.
- Srotas : Rasvaha, Raktavaha, Mamsavaha, Medovaha, Asthivaha, Majjavaha
- Adhisthana: Ansa, basti
- Samuthana: Pakvashya
- Agni: Manda

**General Physical Examination:**

B.P.=140/90mmHg, P/R = 76/min, Pallor-ve, Icterus-ve, Cynosis-ve, Clubbing-ve, Oedema -ve.

CVS : S<sub>1</sub> S<sub>2</sub> Normal.

Chest: B/L equal air entry with no added sound.

CNS: Higher function normal, with no loss of memory, no disturbance of speech etc.

Reflexes: Upper limb-2+, 2+

Lower limb- knee Jerk +, diminished

ankle Jerk - Absent

Plantar response - Flexor

Muscle Power- 5/5 in both Upper & lower limbs, sensory intact.

Muscle tone – Normal.

Muscular Atrophy – Not present.

**Musculoskeletal System-** Shoulder Joint examination:

Swelling – mild



Tenderness- +++

Restriction of range of movement –adduction: 0°, abduction: 60°, flexion: 60°, Extension: 20°

External and internal rotation: total restricted.

### Investigation:

X ray Report- inflammation of capsule and bursa, in subsynovial layer there was fibrosis and degeneration of the collagen suggestive of adhesive capsulitis.

TLC =4400/cumm, Plt= 158000/cumm, N<sub>62</sub>%, L<sub>25</sub>%, M<sub>02</sub>%, E<sub>10</sub>%, B<sub>00</sub>%, Hb<sub>gm</sub>= 11.1gm/dl, Total RBC Count= 3.89million / cumm, RA Factor= -ve, S. Bilirubin =0.8mg/dl, FBS= 227mg/dl, B.Urea= 24mg/100ml, S.Cretanine= 0.8mg/ 100ml, S.Cholesterol= 138.0mg/100ml, S.Triglyceride = 112.0mg/100ml, S.Uric acid= 5.3mg/100ml, SGPT= 21U/L. Glycosylated Hemoglobin- GHbA<sub>1</sub> = 7.8% .

### TREATMENT

As the present patient was K/C/O DM type- 2 with HTN, it was decided that patient was managed with Panchakarma therapy and no oral Vatahara medicine (as mostly are herbo-mineral preparations) should be given. (Note: Oral hypoglycemic drugs taken by the patient was not discontinued during Ayurvedic therapy only dose is titrated according to blood sugar level).

### Samsamana Therapy:

For oral medicament following medicines were given:

1. Pancavalkal Kvatha (decoction of five herbs) – 50ml twice in a day, E/S.
2. Lasunadi Vati – 2 Tab.Twice in a day after meal with lemon juice.

### Panchakarma Therapy:

Svedana karma is generally considered as the Purva karma (pre procedure) which is done before the shodhana chikitsa (Purification therapy). However Acharya charaka included this therapeutic measure in the major 6 aspects of therapies – Shadupakramas. In many diseases one can get amazing results by performing suitable Svedana karma only. So svedana karma can also be seen as a pradhana karma (main procedure) by looking into the status of Shadupakramas. Svedana is indicated in the diseases produced by Vata & Kapha doshas<sup>4</sup>. So Svedana acts directly upon these doshas & pacify them.

### UPANAHA SVEDA (POULTICE SUDATION):-

Upanaha is a type of svedana that is described by all acharaya. Upanaha means bandhana (bandage).

### Types of Upanaha sweda: -

Upanaha sveda can be divided into 2 types. a) Sagni type b) Anagni type<sup>5</sup>.



## PROCEDURE OF UPANAHA SVEDANA

### 1. Purva karma:

In purvakarma the patient with calm & quiet mind who have followed the regimen(dinacharya) of the day, is allowed to sit in a suitable position according to the part in which the sweda should be performed. Then prior to the svedana therapy snehana is done (external) with suitable medicated sneha (Pancaguna taila).

### 2. Pradhana karma:

After proper oleation of the diseased part, pradhana karma (main procedure) is performed. It includes the following steps.

- Powder form of the drugs used should be prepared.
- Nirasthi pishita mamsa prepared & taken in a clean vessel.
- Vehicles for mixing the powder i.e. taila, paya, takra, etc are taken in the quantity required.
- Fresh leaves which pacify Vata dosha are taken & washed very well (in the present study leaves of arka, nirgundi, rasna, dhatura and eranda were taken).
- In the present study Sagni type of Upanaha is used therefore the powder along with its vehicles & saindhava salt in a suitable amount is heated after proper mixing.
- Nirasthi pishita mamsa is added in sufficient quantity in both procedures.
- The paste is then applied over the diseased body part in a proper thickness.
- The Vatahara patras (leaves alleviating Vata like arka) are then put over the lepa in sufficient quantity.
- The whole part is then covered using cotton cloth in a proper way.

### 3. Paschat karma:

Here the regimens (pathyacharanas) suggested in the sneha vidhi was followed by the patient.

### Duration of Upanaha Sveda (Dharana Kala):

The dharana kala of Upanaha sveda is mentioned in classics as 12 hours. But it was changed according to the severity of the disease, in the present study Upanaha was applied only for 1 hour.

## DISCUSSION & RESULT

On the basis of signs and symptoms Adhesive capsulitis can be correlate with Avabahuka. Avabahuka is a disease described in Ayurvedic texts under the heading of Vatavyadi. According to Ayurveda vitiated Vata is only responsible for pain anywhere in the body. Disruption of pathogenesis is treatment so it is essential to understand the basic pathology of the disease. According to Ayurveda, vata is mainly vitiated because of two reasons viz. 1. due to dhatukshaya (loss of essential elements) and 2. due to avarana. Both of these two causes are ultimately intermingled and their diagnosis is beneficial only at the early stage of the disease to determine the treatment methodology. As in avarana, snehana and svedana are contraindicated at early stage. For the pacification of Vata two major types of treatment is available in Ayurveda namely- 1. Vatashamaka and 2. Vata-anulomaka. For successful alleviation of vata, both these treatment modality



should be applied simultaneously. Acharaya Charaka says that management of Vatika disorder should be planned according to the site of its manifestation (adhithana) as well as site origin. In acute condition site of manifestation should be given more emphasis. The present case is known case of Diabetes mellitus, therefore it can be taken under dhatukshayajanya vata vridhi (vitiation of vata due to depletion of essential element). Following the principles of Ayurveda it was decided to pacify the vata by Upanaha svedana ( a specific type of sudation). Svedana is said to one of the best treatment for pain dominated manifestation of vata vitiation. The tactile receptors are very sensitive to temperature changes and respond quickly to even small change in temperature. As we know that pain is a sensation and its origin and manifestation depends upon an intact pathway of neural conduction involving higher center. Increase the temperature of a particular area cause the stimulation of nerve endings for giving fight and flight response to combat the increasing temperature through opening of sweat glands and maintenance of homeostasis. In this procedure the secretion of inflammatory mediators by local receptors, hampering the secretion of various cytokines and interleukins and therefore obliterating the pathogenesis of inflammation. Thus it seems that sudation may enhance but in originality it is best for preventing inflammation. It is worth full to mention here that low temperature sudation is helpful in demolishing the inflammation and thereby pacifying pain but high temperature sudation may further cause tissue injury and worsen inflammation. Keeping this scientific explanation, Upanaha svedana is chosen for the management of adhesive capsulitis. The leaves chosen for the Upanaha Svedana are - Arka (*Calotropis gigantea*), Dhatura (*Datura stramonium*), Eranda (*Ricinus communis*), Nirgundi (*Vitex negundo*), Shigru (*Moringa oleifera*) and Karanja (*Pongamia pinnata*). All these herbs are reported for having analgesic and anti-inflammatory activities<sup>6-11</sup>. Ten days treatment with Upanaha Svedana produces significant relief in pain, stiffness, tenderness, swelling and restriction of range of movement. The blood glucose level was also significantly reduces by adding Panchavalkal Kvatha. Overall assessment of Agni on the basis of especially designed questioner format showed significant improvement. Patient appetite was increased, her bowel and bladder are evacuated properly and timely, her exercise tolerance increased. No toxic side effects were observed during the trial period. Rate of improvement was found to be slow but steady. The overall increment in the range of movement was as follows:

- Abduction - 80° (+ 20° increment)
- Flexion- 80° (+ 20° increment)
- Extension- 30° (+ 10° increment)
- External and Internal rotation- mild improvement

## CONCLUSION

This paper is just an initiative for future venture of pain management techniques in chronic complicated diseases. Panchakarma procedures can be used successfully for restoration of health as these techniques are very cost effective, easy to employed and most desirable benefit is that they potentiate and enhances body's own mechanism of disrupting pathogenesis thereby restrain appearance of toxic side effects.



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