

## TO EVALUATE THE EFFECT OF AGNIKARMA IN THE MANAGEMENT OF FROZEN SHOULDER (AVABAHUK) - A CASE STUDY

Dr. Rajendra Sonekar<sup>1</sup>, Dr. Pratik Devrao Gaikwad<sup>\*2</sup> and Dr. Aruna Sonekar<sup>3</sup>

<sup>1</sup>Professor and HOD, Department of Shalyatantra, R. A. Podar Medical (Ayu) College, Worli, Mumbai 18.

<sup>2\*</sup>P. G. Scholar (M.S), Department of Shalyatantra, R. A. Podar Medical (Ayu) College, Worli, Mumbai-18.

<sup>3</sup>Professor, Department of Shalya Tantra, Prabhudh, Ayurvedic Medical College, Lucknow.

Article Received on  
23 June 2021,

Revised on 13 July 2021,  
Accepted on 02 Aug. 2021

DOI: 10.20959/wjpr202111-21293

### \*Corresponding Author

Dr. Pratik Devrao  
Gaikwad

P. G. Scholar (M.S),  
Department of Shalyatantra,  
R. A. Podar Medical (Ayu)  
College, Worli, Mumbai-18.

### ABSTRACT

**Background:** Frozen shoulder medically referred to as adhesive capsulitis. It is a painful condition of unknown etiology with restricted movement of shoulder. It occurs in three stages, painful phase, stiff phase and thawing phase.<sup>[1]</sup> In textual references of Ayurveda frozen shoulder is closely related to *Avabahuk*. In this condition *vata* is localized in the shoulder region getting aggravated, dries up the bindings (ligament) of shoulders constricts the *siras* present there and causes *Avabahuk*.<sup>[2]</sup> Modern medical science plays very less role in management of frozen shoulder. In Ayurveda various Para surgical procedures were mentioned for diseases of *vata* and *kapha*, *agnikarma* is one of them, that has been recommended in

various musculoskeletal disorders.<sup>[3]</sup> Hence a case study was conducted to evaluate the effectiveness of *agnikarma* in frozen shoulder. **Aim:** To evaluate the effect of *agnikarma* in the management of frozen shoulder (*avabahuk*). **Methodology:** Here we present case of frozen shoulder (*avabahuk*) with comparing the symptoms before and after *agnikarma*. **Result:** Patient get symptomatic relief. **Conclusion:** *Agnikarma* a unique Ayurvedic therapeutic procedure has an instantaneous effect on the deep pain of frozen shoulder. Promising improvement in the range of movements and stiffness of the shoulder joint was observed in the study. *Agnikarma* is a simple, safe, cost effective, less invasive OPD procedure and can be recommended as a therapeutic procedure for frozen shoulder.

**KEYWORDS:** *Agnikarma*, Frozen Shoulder, *Avabahuk*, *Panchloha shalaka*.

## INTRODUCTION

Frozen shoulder medically referred to as adhesive capsulitis is a painful condition of unknown etiology with restricted movement of shoulder. Characteristically there is a slow onset of painful restriction of moments specially abduction and external rotation with pain being prominent at night. Thickening and contraction of glenohumeral joint capsule and formation of adhesions causes pain and restriction of moments. The shoulder is tender to palpate and there will be restriction in both active and passive range of motion depending on the stages of disease. Frozen shoulder typically last for 12 to 18 months with three main phases.<sup>[4]</sup>

### Phase 1

The "freezing" phase or painful stage which may last from 6 weeks to 9 months in this stage patient has slow onset of pain. As pain increases, the shoulder loses motion.

### Phase 2

The frozen or adhesive stage is marked by slow improvement in pain and stiffness. This stage generally last from 4 to 9 months.

### Phase3

The "thawing" or recovery phase, when shoulder motion slowly returns towards normal. This generally last from 5 to 18 months.

Ayurvedic literature mentions about disease *avabahuk* where the clinical description resembles that the frozen shoulder. In this condition the *vata dosha* in the *ansapradesh* causes *shosh* of *ansabandhan* and *sankoch* of *sira* of *ansapradesh* leading to *stambha* and *bahuprasandanahara*.<sup>[5, 6]</sup>

*Agnikarma* is an *Anushastra* karma explained by Aacharya Sushrut for various clinical conditions. *Agnikarma* due to *tikshna* and *ushna guna* eliminates *vata* and relieves pain.

*Agnikarma* is mentioned as line of treatment by Aacharya Sushrut and Vagbhata in conditions where *vata* gets lodged in *snayu sandhi* and *sira* in context of *vatavyadhichikitsa*.<sup>[7]</sup>

In modern medicine no promising management for the acute pain and restoration of joint movements are available other than NSAIDs, local injections of glucocorticoids which have serious adverse effect like shrinkage of skin, weakening of tendons, etc.

*Agnikarma* is simple, less invasive, safe and cost-effective procedure which was widely used in management of musculoskeletal diseases. Hence a case study is selected to evaluate the effect of *Agnikarma* in the management of frozen shoulder.

## MATERIAL AND METHODS

Patient with classical signs and symptoms of frozen shoulder (*Avabahuk*) was selected from the O.P.D. of Department of *Shalyatantra* of M. A. Podar Ayurved Hospital, Mumbai. The patient was thoroughly questioned and examined on the basis of the Performa, sign and symptoms were carried out to confirm the diagnosis.

### Inclusion criteria

- 1 Selection of patient was done irrespective of sex and religion.
- 2 Patient with classical signs and symptoms of Frozen shoulder, i.e. Pain, Stiffness and restricted movements of the shoulder joint.
- 3 Patient between age Group of 16 and 70 years.

### Exclusion criteria

- 1 Patient contraindicated for *Agnikarma* as per text.
- 2 Patient with Acute Traumatic Disorders of Shoulder Joints.
- 3 Subluxations or recurrent dislocations of the shoulder joints.
- 4 Patient suffering from arthritis like Osteoarthritis, Gouty arthritis, etc.
- 5 Immunocompromised patients such as HIV, HbsAg and RTPCR positive patients.

### Assessment criteria

- 1 Stiffness
- 2 Pain

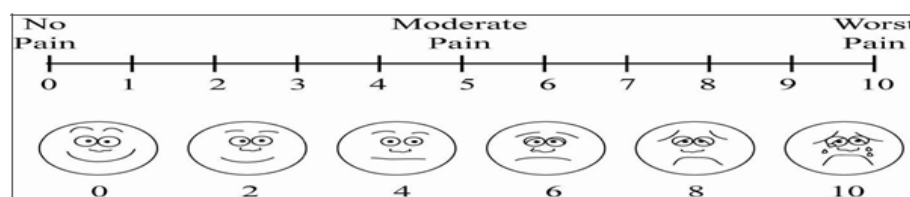


Figure 1: Pain Assessed with Visual analogue scale.

**OBJECTIVE**

- 1 Tenderness
- 2 Range of movements and functional assessment for the shoulder joint.

**Table 1: Assessment Criteria.**

CRITERIA	GR0	GR1	GR2	GR3	GR4
TENDERNESS	No Pain	Patient Says Its Paining	Patient Winces	Winces And Withdraws The Part	Do Not Allow To Touch The Paining Area.
STIFFNESS	No Stiffness	Mild Stiffness	Mild to moderate Stiffness	Moderate Stiffness	Sever Stiffness
ROM (ABDUCTION)	Full Free	Above 120°	60° - 120°	Up To 60°	No Abduction
EXTERNAL ROTATION	Full Free	Above 50°	25° - 50°	Up To 25°	No External Rotation

GR0:Grade0, GR1:Grade1, GR2:Grade2, GR3:Grade3, GR4: Grade4.

**CASE**

A male of age 38 years visited Surgery OPD of M.A. Podar Medical College (Ayu), Worli, Mumbai 18 with the complaints of pain and stiffness of right shoulder joint along with severe restriction of upward elevation of shoulder joints since 3 months. There is no history of any trauma or physical injury. Onset is insidious starting with pain & stiffness that progress in restriction of shoulder joints movement both active as well as passive movements of upper limb are restricted. Pain is constant in nature that become worst at night & when weather is colder. He is unable to perform even small tasks due to restricted upward movement of limb.

**Clinical Examination**

1. Musculoskeletal System - Right Shoulder joint examination
2. Stiffness - moderate stiffness
3. Tenderness - ++ (patient says its paining)
4. Restriction of range of movement – Abduction- 50° External rotation - 20°

**Procedure of Agnikarma<sup>[8]</sup>****Procedure**

Patient will be briefed about the procedure and written consent was taken from the patient. Patient will made to sit comfortably and specially designed the *panchalohashalaka* was heated over gas stove and affected part was prepared with disinfectant solution and most

tender point of shoulder joint will be marked in most tender position. With the *tapta panchaloha shalaka twakdahan* will be done in form of *bindus* (dots).<sup>[9]</sup>

After the procedure of *agnikarma yashtimadhu ghrita* is applied over shoulder joint.<sup>[10]</sup> Selected patient will be treated with *agnikarma* on first day and eighth day (if required). Patient will be observed once in a week during intervention period. Follow up of patient will be taken monthly for 3 months after last procedure.

**Investigations:** X-ray findings shows degeneration of collagen in sub synovial layer of right shoulder joint.



most tender points marked



*Agnikarma* done with *tapta shalaka*



after application of *yashtimadhu ghrita*



*panachloha shalaka*



*yashtimadhu ghrita*



## RESULT AND DISCUSSION

*Avabahuka* (Frozen Shoulder) is produced by vitiated *vata dosha* with *anubhandha* of *kapha*, so *Agnikarma* is considered as best parasurgical therapy to pacify these *doshas*. The properties of *agni* are *sukhsma*, *laghu*, *tikhsna* and *ushnaguna*. It works on both *vata* and *kapha dosha*. It works on *vata* by its *ushna* and *tikhsna guna* and on the *kaphadosha* by *laghu*, *sukhsma*, *tikhsna* and *ushnaguna*.<sup>[11]</sup> After the treatment Pain & stiffness was decreased. The overall increment in the range of movement was as follows: abduction - 70° (+20° increment), External rotation - 30° (+10° increment). Superficial multiple wounds produced by *Agnikarma* healed within 5-7 days. Patient visited for follow up for 3 month after completion of treatment. The scars of wound disappeared in due course of time (3-4 weeks) and there was no adverse effect noted of treatment.



before *agnikarma*



after *agnikarma*



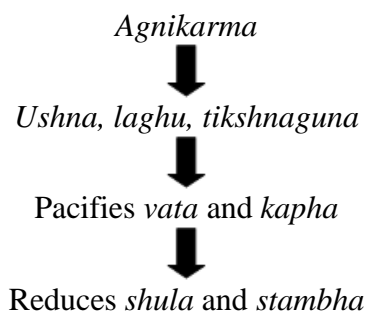
before *agnikarma*



after *agnikarma*

### Probable Mode of Action

*Agnikarma* helps in decreasing the pain by alleviating the *vata dosha*. The *ushna*, *laghu* and *tikhsna guna* of *agnikarma* helps in remaining *dushit kapha* which causes *strotorodha*. When *strotorodha* is removed *vata* gets back to normalcy and pain is relieved.<sup>[12]</sup>



## CONCLUSION

*Agnikarma* a unique Ayurvedic therapeutic procedure has an instantaneous analgesic (*shulahara*) effect on the deep pain of frozen shoulder. Promising improvement in the range of movements and stiffness of the shoulder joint was observed in the study. Although the *Agnikarma* induces burns, injury was superficial, causing minimal discomfort to the patient and the burn marks produced were insignificant. *Agnikarma* is a simple, safe, cost effective, less invasive OPD procedure and can be recommended as a therapeutic procedure for frozen shoulder.

## REFERENCES

1. Norman S Williams, Christopher J.K. Bulstrode P. Ronan O Connel Baily and Loves short practice of surgery Hodder Arnold Part of Hachette 27<sup>th</sup> edition p. 492.
2. Dr. Shivprasad Sharma Editor (3<sup>rd</sup> ed.). Ashtanga Sangraha of Vagbhata, Nidanasthana: Vatavyadhi Nidan Adhyaya, Verse 30. Varanasi: Choukhamba Orientalia, 2012; 416.
3. Kaviraj Dr. Ambika Datta Shastri Editor (Reprint ed.). Ayurved Tatva Sandipika Hindi commentary on Sushrut Samhita of Sushruta, Sutrasthana: Chapter 12, Verse 10. 2013; p. 52.
4. Adhesive capsulitis of the shoulder - Wikipedia.
5. Dr. Shivprasad Sharma Editor (3<sup>rd</sup> ed.). Ashtanga Sangraha of Vagbhata, Nidanasthana: Vatavyadhi Nidan Adhyaya, Verse 30. Varanasi: Choukhamba Orientalia, 2012; 416.
6. Kaviraj Dr. Ambika Datta Shastri Editor (Reprint ed.). Ayurved Tatva Sandipika Hindi commentary on Sushrut Samhita of Sushruta, Sutrasthana: Chapter 12. 2013; p. 52.
7. Kaviraj Dr. Ambika Datta Shastri Editor (Reprint ed.). Ayurved Tatva Sandipika Hindi commentary on Sushrut Samhita of Sushruta, Sutrasthana: Chapter 12. 2013; p. 51.
8. Kaviraj Dr. Ambika Datta Shastri Editor (Reprint ed.). Ayurved Tatva Sandipika Hindi commentary on Sushrut Samhita of Sushruta, Sutrasthana: Chapter 12. 2013; p. 51.
9. Kaviraj Atrideva Gupta., editor, Vagbhata, Ashtangasangraha, Part-1, Sutra Sthana, Agnikarma Vidhi Adhyaya, 40/1, Chowkhamba Krishnadas Academy, Varanasi, Reprint,

2005; pp 258.

10. Kaviraj Dr. Ambika Datta Shastri Editor (Reprint ed.). Ayurved Tatva Sandipika Hindi commentary on Sushrut Samhita of Sushruta, Sutrasthana: Chapter 12, Verse 6.2013; p. 51.
11. Ayurvedacharya Shri. Yadunandan Upadhyay Editor (Reprint ed.). Madhav Nidanam (Part 1) of Madhavkar, Chapter 22. Varanasi: Chaukhamba Prakashan, 2010; p. 490, 491.
12. Timmewar BK, Shinde A, Dawane S, Urhe K, Khandekar V. A Case Study of Agnikarma in the management of Wart. International Journal of Research in Ayurveda and Medical Sciences, 2020; 3(1): 17-18.