

Role of *Agnikarma* in management of *Avabahuka*: A Case Report

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ABSTRACT:

Agnikarma, an important Ayurvedic parasurgical procedure, is basically heat burn therapy used to treat diseases caused by *Vata* and *Kapha dosha*. The *Avabahuka* is *Vata-vikar* which is nearer to the frozen shoulder (FS) of modern science. The classical features of *Avabahuka* as well as *Frozen shoulder* are *Shool* (pain), *Stambha* (stiffness), and *bahu-prasandithara* (decreased range of motion) of the shoulder joint (*Ansha sandhi*). Various treatment modalities available for the treatment of that still some other possible modalities are expected. So a separate remedy by *Agnikarma* with Ayurvedic drugs was adopted to treat this case. A 52-year-old male patient has complaint of pain, and difficulty in motion of the right shoulder joint. The patient has been diagnosed as *Avabahuka* of the right shoulder joint based on history, clinical features, and examination. The *Agnikarma* as an intervention was decided and performed on the right shoulder joint of the patient. The *Agnikarma* subdues the *Vata* and *Kapha dosha* that is responsible for *Avabahuka*. After five sittings of *Agnikarma*, the pain and stiffness in the shoulder region reduced and also increased in the range of motion (ROM). The *Agnikarma* in *Avabahuka* has a promising effect.

KEYWORDS: Adhesive Capsulitis, *Agnikarma*, *Avabahuka*, Frozen Shoulder, *Vatavyadhi*.

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INTRODUCTION:

Ayurveda has a variety of treatment modalities, including surgical, parasurgical, and Panchakarma, for the treatment of various ailments. [1]. The source texts of Ayurveda like Charak Samhita, Sushruta Samhita, Ashtanga Hridaya, etc. have descriptions of various *Vataja*, *pittaja*, and *Kaphaja* diseases. Among them, the *Vata*

dosha causes various diseases like *Avabahuka* [2].

Despite the fact that the *Avabahuka* disease is not mentioned in the *Vata-naanaatmaja* list, Sushruta and other ancient seers described it as *Vataja vikar*. The exact aetiology of *Avabahuka* is not described in the text but can be interpreted by *Dhatukshaya* and *Sanshrushta dosha* [3]. The common features of *Avabahuka* are *Ansha*

sandhi Shool (pain), *Stabdhatta* (stiffness), *Shosha* (muscle wasting), and *Bahupraspandithara* (decreased range of motion) of *Ansha Pradesh* (shoulder region). The *Ansha marma* pathological presentation has similar features to *Avabahuka* [4]. The various treatment modalities for FS are *Snehana* (oleation), *Upnaaha* (poultice), *Agnikarma* (heat therapy), *Bandhan* (bandaging), *Mardan* (deep tissue Ayurvedic massage), *Nasya* (instillation of medicine through nostrils), Physiotherapy, *Marma* therapy, and *Vatashamak chikitsa* [5]. The Ayurveda stalwarts practicing these modalities and providing relief to patients still have challenges in regard to satisfaction and cure. The features of *Avabahuka* disease can be correlated with a frozen shoulder [6]. The frozen shoulder is associated with synovitis and capsule contracture, it is not associated with capsular adhesions. When capsule adhesion occurs then called adhesive capsulitis. The Frozen Shoulder (FS), "Adhesive Capsulitis" or "Periarthritis" is a common musculoskeletal disorders at the shoulder joint in modern medical science [7]. It develops gradually, gets worse, and may resolve. The FS has three stages, respectively: the painful stage (Stage I, freezing from 2 to 9 months), the stiffness stage (Stage II, frozen stage, 4 months to 12 months), the resolving stage (Thawing stage, 12 months to 42 months) [8]. Various methods are in practice to cure FS. NSAIDs, oral corticosteroids, injectable corticosteroids, physical therapy, and surgical management are common treatments for FS. The results still need more expectations [9].

Agnikarma is an Ayurvedic parasurgical procedure. Their detailed descriptions, including indications, contraindications, and material methods, are available at Sushruta sutra sthana twelve (*Agnikarma vidhi-adhyaya*) [10]. Basically, *Agnikarma* is an

ancient form of heat therapy or intentional therapeutic heat burn therapy and is well suited for diseases caused by *Vata* and *Kapha dosha*. It's a day-care, non-invasive, and cost-effective procedure that provides promising results [11].

CASE REPORT:

A 52-year-old male patient attending the Shalya OPD of the institute has complained of pain, stiffness, and restricted movement of the right shoulder region for the last six months. According to the patient, one day after awakening feels pain over his right shoulder region. With due time patient also felt problems in moving his right arm, was unable to raise his hand above head level, and faced difficulty in backward movement of his right upper limb. On examination at the right shoulder region, the surface anatomy finds normal. Locally there is no scar seen, skin appears normal, and skin temperature is normal with no any swelling. The decreased muscle bulk, tenderness at the upper lateral side of the shoulder joint, and stiffness were observed during the movement of the shoulder joint (Table 1).

The patient had past history of consultation for the same and had taken some untraceable remedies for the first five to six days, but the problem got worsen. After that also consulted other allopathic hospitals and took the treatment for 3 months, but finds no significant relief. He also consulted two more hospitals and took treatment for two months, but the disease still persisted. Then he visited our hospital and started treatment on July 1st, 2022.

The patient had no history of any major trauma, Diabetes mellitus, Tuberculosis, Typhoid, or other chronic illness except hypertension, for which taking allopathic medicine as recommended by a doctor. The patient have no significant family history related to the disease. Personally patient have an un-scheduled lifestyle, vegetarian

and non-vegetarian food habit, regular bowel habit, good appetite, proper micturition, sound sleep, tobacco chewing addiction and no known drug allergy. On physical examination there was no pallor, icterus, cyanosis, clubbing, edema, or any lymphadenopathy noticed. The vital sign including blood pressure (130/70 mm Hg), pulse rate (68 beats per minute), respiratory rate (17 per minute), temperature (98 °F), weight (84 Kg), height (5 feet 6 inches) and general condition was normal. The case summary of the patient examination is mentioned below in Table 1.

Investigations: The complete blood picture has normal value as hemoglobin 12 mg/dl, total leucocyte counts 6000 cells/cu mm, differential leucocyte count and other blood picture were normal. The X-ray of the right shoulder region (Anteroposterior & lateral view) shows a normal scan. On the basis of history and clinical examination, the case was diagnosed as "Avabahuka" disease from an Ayurvedic perspective, which is similar to a "frozen shoulder".

THERAPEUTIC INTERVENTION:

The *Agnikarma* therapy, along with some Ayurvedic medicine, was adopted to treat this case. The detail of the procedure of *Agnikarma* is mentioned below-

After explaining the *Agnikarma* procedure to the patient, written consent was obtained. All the required materials are kept ready like cuppor made *Agnikarma shalaka* [12], *Aloe vera* pulp, *Dashmool kwath*, *yastimadhu* powder, dressing material, etc. also checked and ensured cleanliness. The vital signs were monitored and were normal before proceeding. The soft diet and fruit juice were given orally prior to the procedure.

In the sitting posture, the local part (right shoulder) was cleaned with *Dashmool kwath* (antiseptic solution) [13] properly (Figure 1). Initially, explain the procedure and then the *Agnikarma* is performed with a cuppor-made *shalaka* on the right shoulder region. The *bindu* type *Agnikarma* is made and exposed to red hot *shalaka* for a second, keeping the tolerance of the patient in mind. About 30 *bindu* were made [Figure 2]. The care of burn site skin is done by applying the *Aloe vera* pulp immediately. Then *Yastimadhu* powder is sprinkled at the burn site [Figure 3] and the dressing is done. Full aseptic precautions were taken during the whole procedure to avoid infection.

After *Agnikarma* the patient was advised to take care of the local part, avoid trauma, and exertion. A light diet was advised along with a normal lifestyle. Avoid excessive intake of oily (spicy) foods, junk foods, sour foods, excessive maida (fine flour), *dahi* (curd), excessive walking, and exercise. The *Shadbindu tail* [14] is used for *Nasya karma*, two drops twice a day in each nostril on an empty stomach. The Ayurvedic drugs *Simhanad Guggulu* [15] 500mg two tablets twice a day with lukewarm water, and *Dashmool kwath* 40 ml twice a day with water given orally, was prescribed. The *Agnikarma* procedure was repeated for five consecutive sittings at weekly intervals. The follow-up was done after one month. The patient's symptoms decrease continuously with improvement after each sitting. Finally, the patient becomes asymptomatic.

The timeline of events while treating the patient is mentioned in Table 2. The outcome measures and follow-up assessed and their detail mentioned in Table 3.

Table-1: Case summary of examination:

Particulars	Descriptions
Duration	Since last six month
Onset	Sudden, after awakening in morning
Site	Right shoulder joint
Type	In freezing & frozen stage. Basically primary Frozen shoulder.
Relieving factor	Rest
Aggravating factor	Physical work, exertion
Other factors	Patient have no history of Diabetes mellitus, trauma, depression, other chronic illness except hypertension.
Flexion of Right shoulder joint	40°
Extension of Right shoulder joint	30°
Abduction of Right shoulder joint	80°
Adduction of Right shoulder joint	0°
Circumduction of Right shoulder joint	Incomplete, painful
Internal rotation	50°
External rotation	40°

Table -2: Timeline of events:

Time	Event	Improvement
01/07/2022	The Patient was initially seen in Shalya OPD 16 and first <i>Agnikarma</i> sitting completed.	Initial stage with pain, stiffness, and ROM
08/07/2022	<i>Agnikarma</i> has been completed for the second time.	<i>Pain, stiffness slightly reduced</i> <i>Range of motion slightly improved.</i>
15/07/2022	The third sitting of <i>Agnikarma</i> done	<i>Pain, stiffness moderately reduced</i> <i>Range of motion moderately improved.</i>
22/07/2022	Agni karma's fourth first sitting has been completed.	<i>Pain, stiffness moderately reduced</i> <i>Range of motion moderately improved.</i>
05/08/2022	The fifth sitting of <i>Agnikarma</i> done	Slight pain, and stiffness Range of motion achieved
05/09/2022	Follow up	No pain and stiffness Full range of motion achieved

Table 3: Outcome measures and follow up:

Sign/ Symptoms	Assessment in first sitting of <i>Agnikarma</i>	Assessment before the second sitting of <i>Agnikarma</i>	Assessment before the third sitting of <i>Agnikarma</i>	Assessment before the 4 th sitting of <i>Agnikarma</i>	Assessment before the 5 th sitting of <i>Agnikarma</i>	Assessment in follow up (after 15 days)

Pain	3	3	2	1	0	No pain
Stiffness	3	2	2	1	0	No stiffness
Range of motion	Severely reduced	25% improved	50% improved	75% improved	Completely stored	Full range of motion

Clinical images:



Figure 1:
Poorvakarma (prior
local preparation)



Figure 2: Pradhhan karma
(main procedure)



Figure 3: Paschat karma
(after care)

DISCUSSION:

The *Avabahuka* is a *Vatavyadhi* as per Ayurveda literature, and their site is *Ansha sandhi* (shoulder joint). *Avabahuka* has features like pain, stiffness, and decreased range of motion that are nearer to those of a frozen shoulder, a musculoskeletal disorder. *Avabahuka* affects the day-to-day activities of people, which finally affects the quality of life [16]. The Ayurvedic treatment modality *Agnikarma* is basically a heat therapy and is able to pacify *Vata* and *Kapha* [17]. *Dosha* by virtue of its *ushna-guna*. Through *Agnikarma*, the heat transfer directly to the muscular region which helps in joint movement. According to the verse of Vagbhatta (*Ashtanga Hridaya chikitsa* 21/44) [18], the *Nasya karma* indicated in *Avabahuka* disease. The *Nasya* is *vata shamaka* and cures the diseases of the upper part of the body (*urdhwanga*). The *Tridosha* merit of the *Dashmool kwath* relieves pain and swelling of the shoulder region [19]. The *Simhanad Guggulu* have *Ushna Virya*, *Katu Vipaka*, *Vedanasthapana*,

Deepana-Pachana, and *Rasayana* property hence, it has *Vata Kapha shamaka*, *Amapachaka*, *Srotoshodhaka* properties. *Guggulu* also has anti-inflammatory action [20].

Strength: The *Agnikarma* therapy in this case shows better to reduce pain and stiffness and increase the range of motion of the shoulder joints in *Avabahuka*.

Limitation: Although this is a single case report and much more work is going on by scholars still more studies are expected to prove it scientifically.

CONCLUSION:

Avabahuka, a *Vatavyadhi* mentioned in Ayurveda is nearer to the frozen shoulder of modern medical science. *Avabahuka* is a disease of *Ansha sandhi* (shoulder joint) and a common musculoskeletal disorder seen in practice. Although many remedies are available for their treatment still the result is not satisfactory. In patient, the *Agnikarma* (a

heat therapy) for Avabahuka subsides the pain and increases the range of motion of the shoulder joint. *Agnikarma* by cuppor-made shalaka, along with some adjuvant Ayurvedic drugs, brought out significant results by reducing pain, tenderness & stiffness. *Nasya karma* helps by its *Vatashamak* merits. This is a single case report, therefore the therapy can be tried in a large sample properly to reach a conclusion and to observe its proper efficacy.

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