

CLINICAL SUCCESS CASE SERIES -UPANAHA SWEDA AND ITS EFFECT ON
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ABSTRACT

Apabahuka is one among the *vata vyadhi* caused due to the vitiated *vata* and *kapha dosha*, which affects the routine activities of patients like combing, bathing, etc. commonly seen in the patients with sedentary work as well as heavy field workers. Symptoms of *Apabahuka* can be correlated with Adhesive capsulitis, also known as Frozen Shoulder. Incidence of this is seen in 3-5% of people in the general population and up to 20% in people with diabetes, peak incidence is more common in women between the age group of 40-60 years. Management of *vata vyadhi* includes *snehana*, *swedana*, and *mrudu shodhana* also holds good for *Apabahuka* based on *vyadhi avastha*. Contemporary management includes Non-steroidal anti-inflammatory drugs (NSAIDs) and corticosteroids etc aimed of relieving pain. *Upanaha sweda* being indicated in *vata-kapha*-associated conditions of *vata vyadhi* helped in the symptomatic management of the patients which acts as *shoolahara*, *shothahara*, *stambhahara* & also improves range of movements of particular joint affected. Hence the study conducted was a consecutive case series done on an In-Patient Department (IPD) basis for 7 days to study the pre-effect and post-effect of the treatment regimen in *Apabahuka* patients with Diabetes. The objective of the study is to review the effect of *Upanaha Sweda* on patients of *Apabahuka* with diabetes.

KEYWORDS: *Apabahuka*, *Ayurveda*, *Case series*, *Diabetic Mellitus*, *Frozen Shoulder*, *Upanaha Sweda*,**INTRODUCTION**

Ayurveda is a holistic science. It emphasizes on maintenance and promotion of health as well as the curing of diseases. Locomotion is one of the important needs of living beings, impairment in the same will affect the quality of life.

Apabahuka^[1] a variety of *Vata Vyadhi* the vitiated *Vata* and *Kapha* will affect the *Amsa Sandhi* (shoulder joint) thereby causing pain, stiffness, and restricted movements. In *Madhava Nidana*^[2] we find two clinical presentations i.e *Ama Sosha* and *Apabahuka* where *Amsa Sosha* can be considered as a preliminary stage of the disease where the dryness of *Sleshaka Kapha* symptoms like *shoola* during movements are manifested. In contemporary science manifestation of *Apabahuka* can be correlated to Frozen Shoulder.^[3] Where a significant impairment in range of movements in all directions occurs because of inflammation, scarring, thickening, and shrinkage of the capsule around the shoulder joint.

MATERIALS AND METHODS**METHODOLOGY****INCLUSION CRITERIA**

- Patient presenting with symptoms of *Apabahuka* (Frozen shoulder) like shoulder pain, stiffness, and restricted movements of the shoulder joint.
- Patients aged between 40-60 years.
- Patients diagnosed with *Apabahuka* & fit for *swedana* procedure.
- Patient diagnosed *Apabahuka* (Frozen shoulder) with Diabetic Mellitus chronicity of less than 15 years.

EXCLUSION CRITERIA

- Patient of shoulder dislocation and fracture.
- Patient h/o Rheumatoid arthritis, Gouty arthritis, Septic arthritis, Inflammatory arthritis.
- Traumatic injuries to the shoulder joint.
- Patients with other endocrine disorders, cardiovascular diseases, malignancy, and infective conditions.

ASSESSMENT CRITERIA

The cardinal symptoms of *Apabahuka* scored according to the severity and are considered as the assessment criteria for the study. The range of movements was considered an objective parameter. The Range of Movement namely flexion, extension, abduction, adduction, internal rotation, and external rotations of goniometric readings. These objective parametric readings were recorded before and after treatment.

VISUAL ANALOG SCALE^[4]

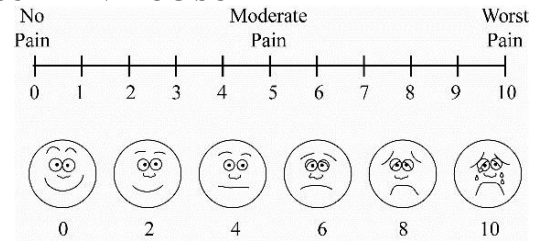


Fig. 1.

GONIOMETRIC MEASUREMENTS

Table-1

FLEXION	
A	up to 180 ⁰ - 0
B	up to 135 ⁰ - 1
C	up to 90 ⁰ - 2
D	up to 45 ⁰ - 3
E	cannot flex - 4

Table-2

EXTENSION	
A	up to 60 ⁰ -0
B	up to 40 ⁰ -1
C	up to 20 ⁰ -2
D	cannot extend- 3

Table-3

INTERNAL ROTATION	
A	up to 90 ⁰ - 0
B	up to 60 ⁰ -1
C	up to 30 ⁰ - 2
D	cannot rotate- 3

Table-4

EXTERNAL ROTATION	
A	up to 180 ⁰ - 0
B	up to 135 ⁰ - 1
C	up to 90 ⁰ - 2
D	up to 45 ⁰ - 3
E	cannot flex - 4

Table-5

ABDUCTION	
A	up to 180 ⁰ - 0
B	up to 135 ⁰ - 1
C	up to 90 ⁰ - 2
D	up to 45 ⁰ - 3
E	cannot abduct- 4

Table-6

ADDUCTION	
A	up to 0 ⁰ - 0
B	up to 45 ⁰ -1
C	up to 90 ⁰ - 2
D	up to 135 ⁰ - 3
E	up to 180 ⁰ -4

CASE REPORT

This case series included 7 patients who visited the OPD of *Panchakarma* at Shri Dharmasthala Manjunatheshwara Institute of *Ayurveda* and Hospital Bengaluru. Cases were initially evaluated for history physical examinations, and shoulder grade movements. Treatment was planned for 7 days on an IPD basis, pre-assessment (before treatment i.e 1st day before

commencement of treatment) and post-assessment (on last day i.e- 7th day after completion of treatment) was done based on the symptomology of the patient.

All the demographic data including age, gender, occupation, affected shoulder joint, and duration of all patients is described in Table 1.

TABLE 7.

Demographic data	P-1	P-2	P-3	P-4	P-5	P-6	P-7
Age	52 years	56 years	48 years	50 years	58years	49years	52 years
Gender	Female	Female	Female	Female	Male	Male	Male
Occupation	Homemaker	Home maker	Home maker	Home Maker	Agriculture	Agriculture	Agriculture
Affected site	Right Shoulder	Right Shoulder	Right Shoulder	Right Shoulder	Left shoulder	Left Shoulder	Left Shoulder
Duration of symptoms	4 years	6 years	10 years	8 years	3 years	6 years	8 years
History of diabetes	1 years	4 years	6 years	2 years	1years	3 years	2 years
History Of Diabetes HbA1C	10.2%	13.4%	12.5%	12.9%	10.1%	13%	10.5%

TREATMENT

After observing signs & symptoms, co-morbidities of patients. *Upanaha sweda*^[5] was planned for patients for 7 days using *Upanaha Dravya*.^[6]

UPANAHA SWEDA VIDHI^[7,8]

Poorvakarma

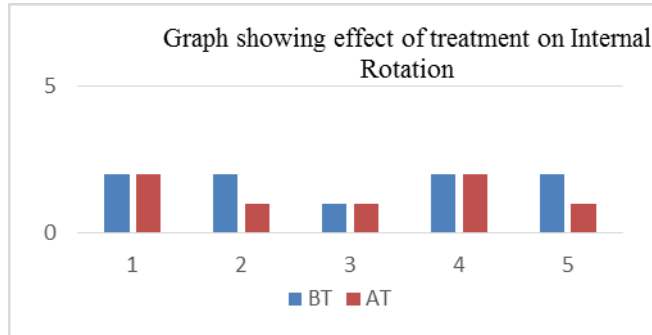
-Required medicinal herbs- *Nirgundi*, *Eranda*, *Arka*, *Agnimantha*, *Shigru patras*, (each 100gms) *Rasna Choorna* (100gms), are chopped & taken in a vessel along with sufficient quantity of *Saindhava lavana* (20 gms) *Dhanyamla* (100ml)

-This mixture is stirred continuously till it becomes a thick paste.

In this study, BT patients were not able to Extend (G-3), AT the 1 patient was able to Extend up to 20° (G-2), 2

patients had improvements about 40° (G-1). 2 patients observed no improvement BT & AT.

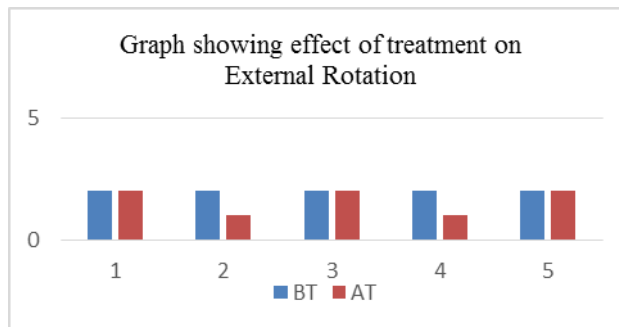
SL.NO	BT	AT
1	2	2
2	2	1
3	1	1
4	2	2
5	2	1



In this study, BT 2 patients were able to do Internal Rotation only up to 45° (G-3), AT the patient was able to Internal Rotation up to 90° (G-2). 2 patients had

improvements of about 45°. 3 patients observed no improvement in BT & A.

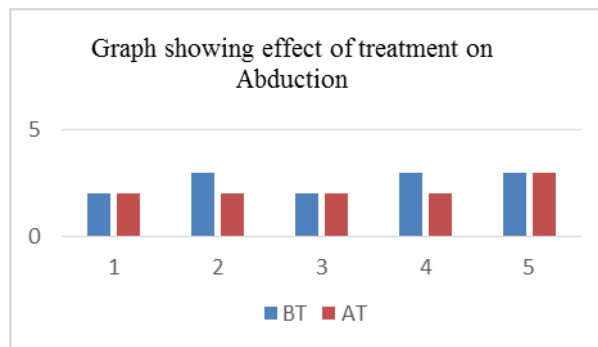
SL.NO	BT	AT
1	2	2
2	2	1
3	2	2
4	2	1
5	2	2



In this study, BT 2 patients were able to do External Rotation only up to 30° (G-2), and AT patients were able to do up to 60° (G-1). 2 patients had improvements of

about 30°. 3 patients observed no improvement in BT & AT.

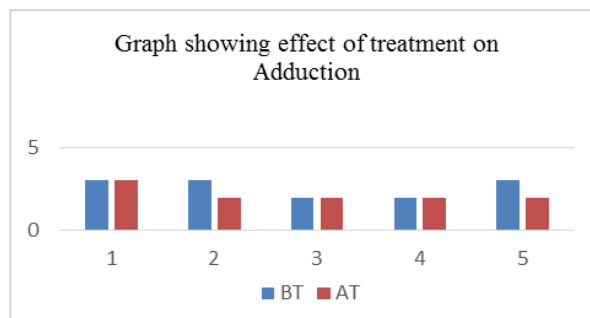
SL.NO	BT	AT
1	2	2
2	3	2
3	2	2
4	3	2
5	3	3



In this study, BT 2 patients were able to do abduction only up to 45° (G-3), and AT patients were able to do up

to 90° (G-2). 2 patients had improvements about 45°. 3 patients observed no improvement in BT & AT.

SL.NO	BT	AT
1	3	3
2	3	2
3	2	2
4	2	2
5	3	2

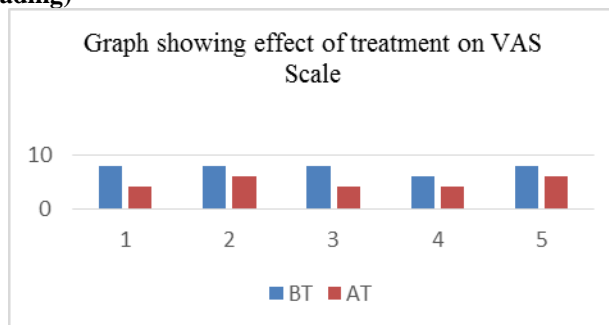


In this study, BT 2 patients were able to do adduction only up to 135° (G-3), and AT patients were able to do up

to 90° (G-2). 2 patients had improvements of about 45°. 3 patients observed no improvement in BT & AT.

Pain Assessment: (Visual Analog scale grading)

SL.NO	BT	AT
1	8	4
2	8	6
3	8	4
4	6	4
5	8	6



In this study, BT 4 patients had pain severity (G-8), and AT patients had significant reduction in pain (G-4) (G-6). 1 patient had improvement from (G-6) to (G-4). All 5 patients had significant reduction in intensity of pain AT.

DISCUSSION

In this case series total 7 patients were taken for the study. In which 4 female patients & 3 male patients were taken. 2 patients dropped out of the study due to rashes after *lepa*, systemic illness. Study showed incidence of *Apabahuka* (Frozen Shoulder) common in females, particularly home makers, due to repeated household activities & commonly associated with Diabetic mellitus. Based on chronicity of Diabetic mellitus severity of the symptoms also seen. Patient with chronic Diabetic mellitus had more severity of symptoms of *Apabahuka*. Patients with fairly controlled Diabetic mellitus had significant improvements in pain & range of motion (ROM), with poorly controlled Diabetic mellitus had no much significant improvements in pain & range of motion (ROM) after the treatment.

Upanaha Sweda explained as the line of treatment, is effective in reducing pain and improving flexibility of the affected shoulder joint in *Apabahuka* (frozen shoulder). *Upanaha Sweda* with mainly *Vatahara Dravyas* or *Kapha-Vatahara Dravyas* with *Laghu, Ushna, Snigdha, Madhura, Katu, Lavana Rasa* etc. properties help in reducing symptoms of *Avabahuka*. Also, *Upanaha Sweda* improves *Rasa-Rakta Vikshepan* in the affected region that provides better nourishment to the joint maintaining the *Shleshak Kapha* and balancing the *Vata Dosh*.

Apabahuka characterised by *Bahupraspanditahara* where restricted range of motion (ROM) of effected shoulder joint, due to *swedana karma* significant improvements of range of motion (ROM)– Flexion, Extension, Internal rotation, Adduction observed. No much improvements in movements -Extension, External Rotation observed after treatment.

PROBABLE MODE OF ACTION

Upanaha sweda is a mode of *swedana* which has a great effect on pain & inflammatory conditions. *Upanaha*

dravyas -vatahar, kaphahara mainly acts on *twak* when applied as *lepa*. *Bhrajaka pitta* present in *twak* helps in absorption through *roma koopa* where the *virya* of *lepa* enters into affected part helps in systemic absorption of drugs & hence the effect is observed. Where drug is mainly absorbed through transdermal route to the affected site. Transdermal delivery of drugs occurs through skin for systemic effect, mainly through passive diffusion through water & lipid soluble drugs. Penetration of drugs occurs through viable epidermis further uptake of drugs by capillary network present in the dermal papillary layer. Due to the heat vasodilation occurs in the superficial tissues. Stimulation of superficial nerve endings causes a reflex dilation of arterioles. By this process necessary oxygen & nutritive materials are get absorbed at the site.

Heat is also having indirect effect on muscle tissues, where increase in temperature causes muscle relaxation & improves muscle action. Heat also increases the activity of sweat -glands, reflex stimulation of sweat glands also stimulates the sensory nerve endings.

CONCLUSION

Swedana is prime modality of treatment explained for *vata vyadhi*. *upanaha sweda*, a variety of *sweda-saagni/Niragni* is found beneficial in *vata vyadhi* in which *kaphanubandhita* is observed & manifested in the form of *Apabahuka* etc. *Upanaha sweda* with *vatahara & kaphahara dravyas* found to be more effective in reducing the symptoms of *Apabahuka* like *shoola, sthabdhata*, & also it showed significant improvements in range of movements & further helps in improving the quality of life of patients.

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Nil.

CONFLICTS OF INTEREST

There are no conflicts of interest.

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