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# EFFECTIVENESS OF VARMAM THERAPY IN KUMBAVATHAM (PERIARTHRITIS SHOULDER) WITH SPECIAL REFERENCE TO RESTRICTION OF MOVEMENTS

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## **ABSTRACT**

Siddha system is one of the traditional Indian system of medicine. It has a unique principles in the treatment of diseases according to pancha bootha theories which was developed into vali, azhal and iyyam. It is spiritually developed and its principles are based on self-realization of Siddhars. In this system of medicine, there are two types of therapies namely internal and external therapy. Both these types are classified into 32 subtypes. There are occasions where administration of oral medicines becomes impossible and hence to revive patient, administration of drugs other than oral routes and certain methods like varmam are highly efficacious. Varmam therapy can be used along with internal medications and external applications as well. Periarthritis shoulder, also called as adhesive capsulitis is one of the most common rheumatological problem in old age group especially, in diabetes mellitus subjects. It is the commonest long term complication next to osteoarthritis in Diabetes mellitus patients. Adhesive capsulitis or Periarthritis can be correlated with Kumbavatham which is one of the vatha diseases mentioned in the siddha literature Yugi Vaithya Chinthamani. The patients with Kumbavatham who underwent Varmam therapy in the OPD of SRRI, Puducherry were observed and results were presented. The effect of varmam therapy was assessed using Shoulder pain and disability (SPADI) index.

KEY WORDS: Kumbavatham, Adhesive capsulitis, Varmam therapy, Diabetes mellitus, SPADI



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## INTRODUCTION

Siddha system one of the ancient traditional systems in India. It has unique principles in the treatment of diseases according to pancha bootha theories. This system is developed by great siddhars. Siddhars deal with 11 metals, 64 pashanam (mercurial & nonmercurial), 120 uprasams (salts and other minerals) and animal products in preparing 32 types of internal medicines and 32 types of external medicines. There are some occasions where administration of these medicines becomes impossible and hence to facilitate patient, administration of drugs other than oral routes. and certain methods like varmam are highly efficacious. <sup>1</sup> Sometimes Varmam therapy is used along with internal medications and external applications as well. The term varmam can be defined as the Flow of Life force in relationship with breathing, which is energised at particular points in human body. Those points are called as varmam pulligal. Being hit at these varmam points in human body either directly or indirectly with a particular force, the functions of body can be altered .This treatment methodology is taught by Guru Disciple method (Gurukulam). The guru who teaches varmam is called as "Varmani or Asan'. 2 Shoulder movement is important for performing activities of daily living (ADLs), including household chores, preparing meals, and recreational activities. Shoulder dysfunction can cause reduced mobility leading to decreased functional independence and a decreased quality of life. 3, 4, 5. Optimizing shoulder range of motion (ROM) to facilitate ADL performance is an important goal for surgeons and clinicians who treat individuals with shoulder dysfunction. <sup>6</sup> Kumbavatham (Periarthritis) is a common cause of shoulder pain and disability. It is characterized by spontaneous onset of shoulder pain accompanied by progressive limitation of both active and passive glenohumeral movement. <sup>7</sup> In siddha text *Yugi vaithya* chinthamani, it was mentioned as pain in the shoulder and upper limb, pricking pain in the cheek and jaw region along with inability in flexion and extension . The most common limitations in range of motion are flexion, abduction, and external rotation. Approximately 70% of frozen shoulder patients were women; however, males with frozen shoulder were at greater risk for longer recovery and greater disability. 8, 9 Intra articular corticosteroid injections and/or physiotherapy programs combining exercise, physical agents, and mobilization are the two most common treatment options used in patients with adhesive capsulitis. 10-19 Supervised physiotherapy in conjunction with the corticosteroid treatment provides faster improvement in shoulder ROM. When physiotherapy used alone, supervised physiotherapy is of limited efficacy in the management of adhesive capsulitis. <sup>21</sup> Shoulder function was significantly improved shortly after manipulation therapy when compared to physiotherapy. 22 However. clear evidence of the efficacy of either or both of these options in improving pain and function and in changing the natural history of adhesive capsulitis is lacking. The present research work was an observation made in OPD, SRRI in Kumbavatham patients who underwent varmam therapy. The results of the present observation may help in the disease management and also improves the quality of life of the patients.

## **MATERIALS AND METHODS**

# Study Design and subjects

This observation was done in 17 subjects (single group) who visited the outpatient department of Siddha Regional Research Institute (CCRS), Puducherry. Patients involved in the study were informed about the study and its publication and necessary consent letter were taken. Necessary approval from the head of institute was also obtained. The therapy was done for a period of two weeks. Both inclusion and exclusion criteria of the patients were mentioned below

#### Inclusion criteria

- 1. Age between 35 to 65 years
- 2. Pain in the shoulder and upper limb
- 3. Inability in abduction, flexion and extension
- 4. With or without diabetic.
- 5. Unilateral or bilateral involvement
- 6. Both sexes
- 7. Willing to undergo Varmam therapy

# Exclusion criteria

- 1. Age below 35 and above 65 years
- 2. Traumatic history
- 3. Fracture within Glenohumeral joint
- 4. Other type of systemic involvement like Gouty, Rheumatoid arthritis, SLE and Psoriatic arthritis.
- Patients who have failed to appear for the treatment less than 5 sittings were not considered for summing up results.

#### Therapeutic schedule

The following varmam points were stimulated one time per day for consecutive 5 sittings in 2weeks. The pressure was mentioned in Varmam literatures. <sup>24-28</sup>

#### Varmam points

- Mozhi piralgai(Sondhari varmam-midpoint of interdigital cleft between middle and ring finger)
- ❖ Kavuli kaalam( web space(dorsal side) the thumb and index finger PI.L<sub>3</sub>,UI<sub>h-3</sub>)
- Chavvu varmam(Mundaga varmam- 6 finger breadth above from midpoint of elbow joint(anterior) A.L.UI<sub>a-60</sub>)
- Enthi kaalam(1 finger breadth anterior to midpoint of axilla Am.L<sub>4</sub>.UI<sub>S-8</sub>)
- Piratharai(near to armpit in posterior side Pm.L<sub>3.</sub>UI<sub>S-8</sub>)
- Kakkatai Kaalam(mid way between the neck and head of arms, 4 finger above from midline of clavicle)
- ❖ Kaiketti varmam.( 2 finger breadth below from medial angle of scapula,P.L<sub>3</sub>,T<sub>5</sub>)

#### Assessment Tools

Shoulder Pain And Disability Index (SPADI). 29, 30

#### **Procedure**

Patients with kumbavatham (periarthritis) who were fulfilling both the inclusion and exclusion criteria were assessed through SPADI index and the data were recorded. Patients were subjected to varmam therapy for consecutive five days. They were also treated with regular OPD medications both internal and external

(medicated oils). Before the commencement of varmam treatment, the disability rate was noted and all the movements with angle were recorded. Abduction movement was also noted clinically. After five days of varmam therapy, patients were examined for prognosis in the range of movements and quality of life.

## **RESULTS AND DISCUSSION**

The SPADI index of total 17 patients both before and after five sittings of varmam therapy, was listed table 1.

All shoulder movements improved well. More than 80% of patients didn't perform abduction movement initially (less than 40°) were improved well after this therapy. Out of 17 patients, 8 patients reaches range of abduction more than 100° and 3 patients improved up to 65°. The improvement in ROM is slightly low in diabetic patients, when compared to Non diabetic. In Diabetic patients, the collagen damage would be more than the non-diabetic subjects. This may be the reason for difference in prognosis between the diabetic and non-diabetic patients.

Table 1 SPADI index

Sl.no	Name	Age/ sex	Diabetic	Abduction (BT)	Abduction (AT)	
1.	Case no.1	67/M	NDM	40	100	
2.	Case no.2	63/F	DM	45	90	
3.	Case no.3	55/F	DM	50	80	
4.	Case no.4	48/M	DM	50	70	
5	Case no.5	65/F	DM	45	90	
6.	Case no.6	60/M	NDM	45	85	
7.	Case no.7	49/F	DM	40	65	
8.	Case no.8	60/F	DM	40	70	
9.	Case no.9	40/F	NDM	45	90	
10.	Case no.10	46/F	DM	40	85	
11.	Case no.11	39/F	NDM	45	80	
12.	Case no.12	52/F	NDM	35	100	
13.	Case no.13	53/F	NDM	45	90	
14.	Case no.14	45/F	NDM	35	100	
15.	Case no.15	55/F	NDM	50	105	
16.	Case no.16	60/F	DM	35	55	
17.	Case no.17	60/F	DM	35	60	

Table 2
Descriptive Statistics

Paired Samples Statistics								
			Mean	N	Std. Deviation	Std. Error Mean		
Pair 1	Abduction_	ВТ	42.3529	17	5.33785	1.29462		
	Abduction	ΑT	83.2353	17	14.88930	3.61119		

## Analysis of results

The abduction changes observed before and after Varmam treatment was listed in table 2. It was then tested for the null hypothesis H0: There is no difference in abduction before and after treatment vs. alternate hypothesis H1: There is difference in abduction before and after treatment using the paired t-test at 5% level of significance. After varmam therapy, the abduction

changes has been improved and found to be highly statistically significant (p-value=0.000) and was depicted in table 3. Hence there was an evidence to reject the H0 and for the tested no. of patients there was a significant difference in abduction before and after varmam treatment. Patients have improved well in carrying weight by affected limbs and their ROM was also increased.

Table 3

Effect of varmam treatment in Abduction changes

Paired Samples Test										
Paired Differences										
Pair 1	Mean Std. Deviation	Std Dovistion	Std.Error Mean	95% Confidence Interval of the Difference		Т	Df	Sig.(2-tailed)		
Abduction BT – Abduction AT		Sid. Deviation		Lower	Upper	-				
Abduction B1 – Abduction A1	-40.88235	14.70919	3.56750	-48.44512	-33.31958	-11.460	16	.000		

# CONCLUSION

This observational study has revealed that the Varmam therapy for kumbavatham patients ( periarthritis shoulder ) was very effective in their disease management. This external therapy has changed their quality of life significantly in two week along with regular OPD medicines. Varmam therapy has facilitated their

ADLs also. Hence it may be concluded that Varmam therapy may play a positive role in the kumbavatham management.

# **CONFLICT OF INTEREST**

Conflict of interest declared none.

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