ROLE OF VARMAM THERAPY IN KUMBAVATHAM MANAGEMENT

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INTRODUCTION
Siddha system is originated in southern part of India, which is one of the ancient traditional systems of medicine. This system has its own unique methodology of treatment for various ailments. Varma is one among such therapies used to treat multiple ailments, especially related to musculoskeletal and neurologic deficits. This helps the suffering community either acting by locally or regulating the three humors, i.e., Vali, Azhal, and Iyam. Varma therapy can also be used along with internal medications and external applications as well. Varma is the points wherever the energy (pranan) is stored, and when particular area or organ is affected, the energy will spread to that area and make that organ function effectively. This treatment methodology is taught by the guru-disciple method (Gurukulam). The guru who teaches varma is called as “Varmani or Asan.” According to Siddha principles, the movements of the body are mainly controlled by Vali. Hence, the varma points were also classified as Vali, Azhal, and Iyam varma points [1].

Kumbavatham (periarthritis or adhesive capsulitis) is a common cause of shoulder pain and disability. In Siddha text Yugi Vaihya Chinthamani, it was mentioned as pain in the shoulder and upper limb, pricking pain in the cheek and jaw region, and inability in flexion and extension of the entire upper extremity. Patients typically describe onset of shoulder pain followed by a loss of motion [4], and the most common limitations in range of motion are flexion, abduction, and external rotation. Approximately 70% of frozen shoulder patients were women [5]; however, males with frozen shoulder were at greater risk for longer recovery and greater disability [3,5].

The aim of the present study was to evaluate the effect of varmam therapy on kumbavatham management. The result of the present study may help in the betterment of disease management.

METHODS
Study design and subjects
This pilot study was done in 17 participants (single group) who visited the outpatient department of Siddha Regional Research Institute (CCRS), Puducherry. The study was conducted for a period of 2 weeks. Both inclusion and exclusion criteria for the patients were mentioned below.

Inclusion criteria
1. Age between 35 and 65 years
2. With or without diabetic
3. Unilateral or bilateral involvement
4. Both sexes.

Exclusion criteria
1. Age below 35 and above 65 years
2. Traumatic history
3. Fracture within the glenohumeral joint
4. Other type of systemic involvement such as gouty, rheumatoid arthritis, SLE, and psoriatic arthritis
5. Attended varmam therapy <5 sittings.

Therapeutic schedule
The following varmam points were stimulated 1 time/day for 5 days. The pressure is mentioned in varmam literatures.

Varma points [6-10]
- Mozhil piralgai (Sondhari varmam - midpoint of interdigital cleft between middle and ring finger).
- Kavuli kaalam (web space) between the thumb and index finger PLL, UI).
- Chavvu varmam (Mundaga varmam - six fingerbreadth above from midpoint of the elbow joint (anterior side) A.L UI).
- Enthi kaalam (one fingerbreadth anterior to midpoint of the axilla. Am.L UI).

ABSTRACT

Introduction: Siddha medicine, one among the ancient indigenous medical systems of India, has a repository of classical formulations as internal medication and various other unique techniques/therapies as external usage. Varma is one among such therapies used to treat multiple ailments, especially related to musculoskeletal and neurological deficits. Sometimes, varma therapy is used along with internal medications and external applications as well.

Objective: Adhesive capsulitis or periarthritits may be correlated with kumbavatham which is one of the vatha diseases mentioned in the Siddha literature Yugi Vaithya Chinthamani. Kumbavatham is one of the most common rheumatological problems in old age group, especially those in diabetic participants. It is the most common long-term complication next to osteoarthritis in diabetes mellitus patients.

Methods: The present intervention was done in kumbavatham patients who volunteered to undergo the varmam therapy with regular outpatient department medications, and the results were presented. The effect of varmam therapy on kumbavatham was assessed in accordance with shoulder pain and disability index.

Result and Conclusion: The result of the current study concludes that the varmam therapy might be useful in the management of kumbavatham diseases and thus improves the quality of life of the patients.

Keywords: Kumbavatham, Adhesive capsulitis, Varmam therapy, Diabetes mellitus, Siddha.
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Piratharai (near to armpit in posterior side Pm.L3.
S-8).

Kakkatai Kalam (midway between the neck and head of arms, four fingers above from midline of the clavicle).

Kaiketti varmam (two fingerbreadth below from medial angle of the scapula, P.L3.
T5).

Assessment tools
Shoulder pain and disability index (SPADI) [11,12].

Procedure
Patients with kumbavatham (periarthritis) who were fulfilling both the inclusion and exclusion criteria and volunteered to participate in this study were assessed through SPADI index, and the data were recorded. Patients were asked to visit outpatient department (OPD) for consecutive five sittings of varmam therapy. They were also treated with regular OPD medications both internal and external (medicated oils).

Before the treatment, the disability scale is recorded by SPADI, and all the movements with angle were recorded clinically. After five sittings of varmam therapy, the patient was examined for prognosis.

RESULTS AND DISCUSSION

Before initiating the treatment, both pain and disability in doing regular household works were scored based on patient words. After varmam therapy, improvements were noted again from the words of patients. Range of movements was also assessed both before and after varmam therapy. The SPADI scores of total 17 patients, both before and after 5 days of varmam therapy, were recorded and were listed in Table 1.

Analysis of pain scale percentage
The changes in pain and disability percentage observed before and after treatment versus alternate hypothesis $H_1$: There is difference in pain and disability percentage before and after treatment using the paired $t$-test at 5% level of significance. After varmam therapy, the pain and disability percentage have been improved and found to be highly statistically significant ($*p=0.000$) and was depicted in Table 3.

CONCLUSION
From this study, it was observed that the varmam therapy has decreased the pain and disability score in kumbavatham patients. Along with

### Table 1: SPADI index score before and after treatment

| S.N | Name | Age/sex | Before treatment | After treatment |
|-----|------|---------|------------------|----------------|
|     |      |         | Pain scale score (%) | Disability scale score (%) | Pain scale score (%) | Disability scale score (%) |
| 1   | Case 1 | 67/M | 70 | 46.25 | 30 |
| 2   | Case 2 | 63/F | 66 | 52.5 | 25 |
| 3   | Case 3 | 55/F | 76 | 77.5 | 31.25 |
| 4   | Case 4 | 48/M | 80 | 78.8 | 25 |
| 5   | Case 5 | 65/F | 72 | 72.5 | 38.75 |
| 6   | Case 6 | 60/M | 52 | 46.25 | 17.5 |
| 7   | Case 7 | 49/F | 86 | 73.8 | 28.8 |
| 8   | Case 8 | 60/F | 54 | 50 | 26.25 |
| 9   | Case 9 | 40/F | 48 | 60 | 21.25 |
| 10  | Case 10 | 46/F | 72 | 77.5 | 23.75 |
| 11  | Case 11 | 39/F | 70 | 78.75 | 38.75 |
| 12  | Case 12 | 52/F | 68 | 65 | 26.25 |
| 13  | Case 13 | 53/F | 68 | 65 | 21.25 |
| 14  | Case 14 | 45/F | 78 | 71.25 | 35.75 |
| 15  | Case 15 | 55/F | 64 | 65 | 17.5 |
| 16  | Case 16 | 60/F | 70 | 71.25 | 36.25 |
| 17  | Case 17 | 60/F | 88 | 81.1 | 25 |

**SPADI**: Shoulder pain and disability index

### Table 2: Descriptive statistics

| Variable | Mean | N | Standard deviation | Standard error mean |
|----------|------|---|--------------------|--------------------|
| Pain scale score (%) before treatment | 70.0000 | 17 | 11.11306 | 2.69531 |
| Pain scale score (%) after treatment | 26.8235 | 17 | 7.78007 | 1.88694 |

### Table 3: Effect of varmam treatment in kumbavatham

| Variable | Mean±SD | Standard error mean | 95% confidence interval of the difference Lower | Upper |
|----------|---------|---------------------|-----------------------------------------------|-------|
| Pain_BF-Pain_AT | 43.17647±10.74846 | 37.65012 | 48.70282 | 16.562 |

**Paired samples test**

| Variable | Paired differences | T | df | Significant (two-tailed) |
|----------|--------------------|---|----|-------------------------|
| Mean±SD | Standard error mean | 95% confidence interval of the difference | | |
| Lower | Upper |
| Pain_BF-Pain_AT | 43.17647±10.74846 | 2.60688 | 37.65012 | 48.70282 | 16.562 | 16 | 0.000 |

- Piratharai (near to armpit in posterior side Pm.Ls.Ul.s).
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OPD medications (internal and external), this external therapy has changed their quality of life significantly in 5 days. varmam therapy has facilitated their ADLs also. Hence, it may be concluded that varmam therapy may play a positive role in the management of kumbavatham.

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