

SIDDHA EXTERNAL THERAPIES: THOKKANAM AND VARMAM IN THE MANAGEMENT OF KUMBAVATHAM (FROZEN SHOULDER) – A CASE STUDY

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ABSTRACT

A 50 years old married female from Palamunai, Arayampathy reported to Siddha Ayurveda Base Hospital (SABH), Puthukkudiyiruppu, Batticaloa, Sri Lanka with severe pain with tenderness and restricted extension, abduction, adduction and rotation of her right shoulder both active and passive movements for 9 months. She was diagnosed to be affected by frozen shoulder which is equated to Siddha medicine one of the vatha disease Kumbavatham. She was treated with Siddha external therapy thokkanam and Varmam with Melugu thylam. The patient has been following advices strictly Siddha diabetic diet and pathiyam. Assessment of pain and shoulder movements before, during and after treatment recorded and Siddha assessment of envagai thervu and manikadai nool also recorded. The patient was observed under the close monitoring for 6 months after 21 days of treatment. There were no adverse reactions observed during the course of treatment. The combination therapy has proved the reduction in pain and restricted movements which was measured using Visual Analogue Scale (VAS), goniometer and SPADI index. This case study demonstrated that the application of Thokkanam and Varmam effectively reduced the symptoms of Kumbavatham.

Key words: Siddha, Kumbavatham, Thokkanam, Varmam, pathiyam, Melugu thylam.

INTRODUCTION

Kumbavatham is a disease that affects the shoulder joints manifested by the vitiated Vatha thosam according to the Siddha system. Kumbavatham is characterized by pain in shoulders and upper limbs with difficulty in abduction and adduction of shoulders, burning sensation in cheeks and eyes, giddiness, fever, pain below the umbilicus, inflammation below the tongue etc⁵. It has mentioned in 84 types of Vatham⁵ which can compared with frozen shoulder also known as periarthritis or painful stiff shoulder or adhesive capsulitis in modern medicine²⁵. Adhesive Capsulitis (AC) is a self-limiting disease² that resolves one to three years⁶ which is typically present with an atraumatic history of progressive painful restriction in a range of movement of the glenohumeral joint.² Pathological condition is resulting from inflammation of the joint capsule and synovium followed by fibrosis, scarring and contracture of the capsuloligamentous complex.¹⁴ The capsuloligamentous changes result in global loss of both passive and active range of motion (ROM) of the glenohumeral joint¹¹.

International classification of Disease (ICD) described medical condition of AC can be divided into two categories: primary are no obvious causes meanwhile secondary have causes. Several risk

factors are associated with this condition. These include previous trauma, increasing age, female gender, dyslipidaemia, hypertension, thyroid dysfunction and diabetes mellitus. Diabetes patients are more prone to develop frozen shoulder^{2,4,11}. Frozen shoulder patients usually present in the sixth decade of life and onset before the age of 40 is very uncommon; the peak age is 56.¹⁴ The condition occurs slightly more often in women than men¹. Women aged between 40 and 60 years are the most commonly affected by frozen shoulders⁴. It has been estimated to affect one person in fifty, every year. Prevalence of frozen shoulder in lifetime based is estimated to be 3 to 5 % of the general population⁶ and it is affected 8.2 % men and 10.1 % of women of working age.

External and internal treatment therapies are briefly explained by Siddha system for that curing and preventing purposes of diseases. Thokkanam & varmam therapy are very effective therapies for curing diseases externally¹⁶. Drugless and non-invasive Varmam therapy indicates stimulation of specific points with pranic energy which is timeless, more effective and give long lasting results^{18,23}. Severity of pain significantly decreased by Varmam manipulation¹⁰. This case study has been evidence-based management of the disease according to the treatment methods mentioned in the Siddha texts and Kumbavatham successfully treated with Siddha varmam and thokkanam therapy.

Patient Information

A 50 years married female from Palamunai, Arayampathy reported to SABH/Puthukkudiyiruppu, Arayampathy, Batticaloa, Sri Lanka. She is appeared with severe pain with tenderness and restricted extension, abduction, adduction and rotation of her right shoulder both active and passive movements for 9

months. She was admitted to external treatment unit for daily visit at the hospital due to the patient's convenience. History revealed that there was no history of trauma but pain in right shoulder with gradually restricted abduction and rotation for 9 months. The patient suffering from difficulty in wearing blouse, combing hair, taking things by herself above her height and day today activities was limited. The pain was worse at night, aggravated while lying on right side and any movements in right shoulder. The x-ray of right shoulder mentioned no fracture or tear in rotator cuff and the joint space in right shoulder was reduced which was taken before 7months. She had physiotherapy treatment for 4 months back symptoms reduced partially. But symptoms reappeared and then the patient came to the hospital. She has been diabetic for six years, with poor blood sugar control due to poor dietary habits and inconsistent medication use. At the time of examination, her fasting blood sugar level was 280 mg/dl, 310 in postprandial and Hb A1C 11.2. Her mother too has diabetic. So, she has a positive family history of diabetes. She is taking diabetic drugs Metformin 500 mg bd for the past 4 years and Gliclazide 5 mg morning for last 6 months. She had a mixed diet pattern and poor income, for diet taking tubers and cereals very frequently. Her sleep pattern was disturbed due to pain and bowel habit too is constipated and bladder is normal.

Clinical Findings

Clinical findings recorded like vital signs, pain score, range of movements and envagai thervu and manikadai nool of Siddha assessments. Muscular wasting not identified during clinical examination around the shoulder and upper limb.

Diagnostic Assessments

Visual Analogue Scale (VAS) measured pain and goniometer assessed

range of movements of shoulder joints in sitting position. The Shoulder pain and disability index (SPADI)15 form filled for this patient; pain 43/50 at the initial time. Assessment of shoulder movement before and after treatment recorded in the table 1. Siddha assessment of envagai thervu (Eight-Fold System of Clinical

Assessment) was found to be tabulated table 5. The above symptoms and assessments; she was diagnosed to be affected by Kumbavatham (Adhesive capsulitis).

Table: 1 Assessment of shoulder movements before and after treatment

Shoulder movements	Before treatments		After treatments	
	Right	Left	Right	Left
Forward Flexion	45	160	110	170
Extension	20	60	55	60
Abduction	30	110	100	150
External rotation	35	65	65	70
SPADI	83.07 %	18.13 %	23.07 %	3.07 %

Therapeutic intervention

Purgation therapy

Investigations of blood, assessment of pain, shoulder joint movements and SPADI scoring was done in first day. Purgation therapy was started next day. Agasthiyar kulambu12,20 was given for purgation with the notchi juice at 5.30 a.m in a single dose on 05.01.2023 under my observation. The purgation was started at 6.15 a.m and passed loose stools 6 times morning and nausea 2 times. Then, after purgation subsided, she was taken a glass of butter milk. She was given diet a cup of curd rice for lunch and string coppers for dinner on the day of purgation and any therapy was not done on that purgation day. Assessment of pain, shoulder joint movements and SPADI scoring was done next day of purgation also.

Thokkanam and Varmam therapy

Thokkanam and Varmam treatments were started with Melugu thylam13,20 which has been used for more than years for Vatha diseases in Siddha medicine in Sri Lanka. This thylam is indicated for Vatha roga vali etc13. Thokkanam and

Varmam therapy of Siddha was done daily at 8.00 a.m in an empty stomach.

Table: 2 Ingredients of Melugu thylam

Tamil name	English name	Quantity
<i>Manjisti (Rubia cordifolia)</i>	Indian madder	50g
<i>Nannari (Hemidesmus indicus)</i>	Indian sarsaparilla	50g
<i>Kungilyam (Shorea robusta)</i>	Sal tree	50g
<i>Thean mezhugu (Cera alba)</i>	Bees wax	50g
<i>Neer</i>	Water	3.2l
<i>Nalennai</i>	Sesame oil	

Nine types of thokkanam techniques were adopted to the disease condition in sitting position according to the Siddha literatures. Points of Siddha Varmam therapy tabulated in table 3 which was given by fingers based on Varmam texts; Intensity of pressure applied: Uthamam:

½ minute; Posture: sitting; Duration of treatment: 15 min; time: in empty stomach; Technique: Amarthal (pressing); 10s gap between each

manipulation. The patient was taken hot water bath after 3 hours of treatment.

Table: 3 Varmam points

	Points of Varmam	Anatomical location	Procedure
1	Mudichu varmam	At the junction of C7 & T1	Place the middle three fingers over the cervical prominence. Give pressure in clockwise rotation for three times. Then stretch the fingers and manipulate up to the right shoulder. Follow the same technique in the opposite side. Manipulate in a clockwise and anticlockwise rotation 3 times each and move downwards along the spine up to T6.
2	Kaakkattai kalam	midway between the neck and head of arms, four fingers above from midline of the clavicle	Place the middle three fingers over the supraclavicular fossa; Press and release
3	Enthi Kaalam	one finger breadth anterior to midpoint of the axilla	Place the tip of the middle three fingers in anterior axillary fold; Press and release
4	Piratharai Varmam	near to armpit in posterior side	Place the tip of the middle three fingers in posterior axillary fold; Press and release
5	Kaikoottu varmam	In the centre of the axilla.	Place the tip of the middle finger; press and release 3 times.
	Chavvu varmam	Anterior aspect of arm 4 finger below the shoulder	Place the middle of the thumb; press & release 3 times.
7	Manibandha varmam	Anterior aspect of the middle of the wrist joint	Place the middle of the thumb and press and release 3 times.
8	Kavuli kalam	Between the thumb and index finger on the dorsum of hand	Place the tip of three fingers longitudinally in the web area; press & release 3 times
9	Sevikutri Varmam	Fossa in front of tragus of the ear	Place the central part of the middle finger; apply gentle upward pressure to the point.

Internal Medicine

Thripala chooranam 2g twice daily was prescribed for diabetic control for 21 days in addition to modern medicine. Which is advised to take after 2 hours of having allopathy medicines. It is a Siddha drug

used in OPD at SABH, Puthukkuduyiruppu.

Pathiyam

It is advised to avoid foods that aggravate vatha dosha, including tubers

and karamani (long beans). The diet free from sweet, sour taste, food with cold potency and water rich vegetables like pumpkin, cucumber was avoided. Advice to take rice filtered with two times, junk vegetables (pinchu) of brinjal, beans, fig fruit; monitor lizard, kaadai (quail), kawthari (gray francolin) & white goat meat. Mudakothan (baloon vine spinach), Thuthoovalai), Mookirattai (hogweed), Vathanarayanan (white gulmohar), Sirukurinjan (red fruit creeper), Arai keerai (red spinach), Vallai (Indian pennywort), Curry leaves, Mint leaves were provided 9,20. Kurrakkan (millet) & Kaelvaraku (finger millet), Kollu (horse gram) mixed pittu, roddi & String coppers given at dinner & breakfast. Avoided cold floor, cold air and cold bath. Pathiyam was adhered during the hospital day and after the treatment also.

Outcome

Intensity of pain & disability were gradually reduced after 21 days of treatment. The range of movements improved who have been done daily activities easily. The time line clinical findings tabulated table:4. Fasting blood sugar value was becoming 126mg/dl, postprandial was 240 mg/dl, HbA1C 6.9 at the time of treatment end. Other investigations and vital signs were normal. Siddha assessments were portrayed in table:5. Siddha Manikadai nool was 7 1/2.

Table: 4 Clinical findings during and after treatment

Name	Day 1	Day 7	Day 14	Day 21
Pain score	9	6	4	2
Pain	43/50	32/50	20/50	8/50
Disability	65/80	59/80	46/80	22/80

SPA	83.07	70%	50.76	23.07
DI	%		%	%

Table: 5 Envagai thervu before and after treatment

Envagai thervu	Findings Day 1	Day 21
Naadi	Vathapitham - maathirai increased	Vathapitham - normal maathirai
Sparisam	Tenderness with warmth	No tenderness with normal temperature
Naa (Tongue)	Coated	Normal
Niram (Colour of the body)	Brown	Brown
Mozhi (Speech)	Low pitched	Normal pitched
Vizhi (Eye)	Normal, No discolouration	Normal, No discolouration
Malam (Stool)	Constipation	Yellow colour, semi solid
Neerkuri (urine examination)	Normal - Straw colour	Normal- Straw colour
Neikuri (Oil in urine)	Oil spreads in the form of aravena neendathu (snake pattern) - fast spread	Steady spread snake pattern

The patient was closely followed and observed for 6 months and she had no aggravation of symptoms. There were no adverse events observed during the

course of treatment. She was advised to follow the pathiyam.

DISCUSSION

The patient was treated in the line of management of Vatha diseases in Siddha texts. Who was diagnosed Siddha aspects of envagaithervu like nadi, neikuri and manikadai. Purgation was given to reduced vitiated Vatham. Thokkanam is one of the methods of 32 types of external therapy. All vatha diseases are relieved by the periodical Thokkanam on the affected areas and restore the normal health of an immobilized persons¹⁶. It simply stretches soft tissues by moving the joints and their related structures. Manipulation is a hands-on therapy of Thokkanam increases the effectiveness of the motor and sensory actions of the arms, legs & shoulders and relieve pain¹⁶. According to the Therayar, its strengths blood, flesh and skin, improves sleep, vitality and relaxes whole body¹⁶. It also regulates the nerve functions, improves blood circulations, enhances immunity and removes waste tissues. It also called Marthanam¹⁶.

The procedure involves the therapeutic manipulation and mobilization of the affected areas of the body by applying controlled pressure to specific hidden vital points, known as Varma pulli^{16,18,19}. Pain and disability were managed using Varmam therapy that Varmam points are stimulated with fingers, hand, some occasions with toes and foot¹⁸. Effects of Varmam treatment of Kumbavatham were reported previous studies⁷. The philosophy of mechanism of action have been explained in Siddha literatures. 72 000 Naadis (energy channels) are located in our body which through energy is circulated in the life. The flow of life energy can be equated to the flow of current. But the strength of life energy is of low voltage which can't be measured by ordinary electrical devices. Skin produces resistance to the

normal flow of life energy. Circulating invisible energy channels where the flow of energy is boosted at the stations considered Varmam points. Any injury or block in the flow of vital life energy leads to diseases. Therapeutic manipulation of Varmam points which are called Varmam therapy. Pranic energy is believed to remain concentrated at specific Varmam points. When these points are manipulated with the appropriate force and for a defined period of time, the stored energy is released, facilitating healing and restoring balance in the body. Affected individuals' relief from diseases by regulating the flow of Pranic energy^{16,18,23}. Varmam points are located over the various parts of body in nerves, nerve joints, bones, muscles, ligaments and inner organs. Nine Varmam points were stimulated to achieve a therapeutic effect in patients diagnosed with Adhesive Capsulitis (Kumbavatham).

Combined treatment methods of Thokkanam and Varmam more effective for the management of the Vali diseases. In this case study also were proved this theory. The Siddha external oil Melugu thylam have antivatha action^{9,20} to reduce pain and most of the ingredients contains analgesic and anti-inflammatory properties⁹ which are shown in table 2. The patient has diabetes with poor control, who is affected easily to adhesive capsulitis². The patient has been following allopathy medicine and Siddha medicine for Diabetes internally to controlled it. Tripala was effective on the reduction of blood glucose level²⁶. However; who was strictly followed diet pattern prescribed based on Siddha literatures. The patient was advised to avoid tubers and sour taste and maintain pathiyam which leads to prevent to increased Vali humour and also normalise it.

CONCLUSION

The reduction of pain and restricted movements were measured by using goniometer, SPADI index and Visual Analogue Scale (VAS). The SPADI index and VAS were reduced during the treatment process and adverse reactions were not occurred. The Combined treatment methods of Thokkanam and varmam is more effective for the management of the Vatha diseases. The Siddha treatment protocol of line of treatment and pathiyam also strongly helps to managed the Kumbavatham. Mulugu thylam also reduce vatha vali. In this case study it was proved the theory of Thokkanam and varmam with diet as pathiyam minimized the Kumbavtham symptoms. Although large sample size clinical trials are required to prove the results.

Patient Perspective

The patient self-report says, that she was highly satisfied with the treatment. Her quality of life was improved due to reduction of symptoms. She was very much impressed about the thokkanam and Varmam treatment. she doesn't have recurrence of pain and diabetes also controlled.

Informed Concerned

Written informed consent was obtained from the patient. The patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that name and initials will not be published and guaranteed.

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