

CASE REPORT

Role of *Varmam* Therapy in the Management of Rotator Cuff Syndrome

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ABSTRACT

Rotator cuff syndrome is one of the most common cause of shoulder pain. Elderly population are more affected. The aim of the study is to describe the evaluation and management of rotator cuff lesion in an elderly female with *varmam* therapy. The patient reported gradual onset of pain. There was no history of fall or trauma. Pain was present on right shoulder and was sharp and deep on abduction and flexion of the left shoulder which reported a VAS of 9/10. The patient had tried all conservative treatments and was finally advised for surgery. In the OPD the patient were given *varmam* therapy for three months as per following the *Siddha varma* protocols. Within the treatment course the patient started to do normal daily activities slowly without pain. The uniqueness of this case is that it involves an elderly female who sustained multiple causative factors for rotator cuff lesions.

KEYWORDS

Elderly, Rotator Cuff syndrome, *Siddha*, *Varmam*.

1.0 Introduction

Shoulder pain is a common musculoskeletal complaint in the general population. Rotator cuff syndrome is one of the most common cause of shoulder pain seen in the elderly population.^[1,2] The prevalence of shoulder pain in the elderly has been estimated to range from 21% to 27%, the prevalence of rotator cuff tear increases with advanced age and have a limited ability to heal because of several factors.^[3] In allopathic system of medicine, NSAIDs and steroids are generally prescribed along with physiotherapy. But still it remains as asymptomatic approach. If *Siddha* and *varmam* therapy are intervened appropriately, further progression of the disease can be prevented. In this attempt, a case of rotator cuff syndrome has been successfully managed with *Siddha* and *Varmam* therapy. The

goal of treatment is to restore the functional capacity and to reduce or eliminate pain in elderly patients.

2.0 CASE REPORT

A 69-year-old female visited Siddha Clinical Research Unit, A & U Tibbia College Campus, Karolbagh, New Delhi, with complaint of right shoulder pain for 5 years, onset was gradual. No history of fall or trauma. Pain was present on right shoulder. Pain was sharp and deep on abduction and flexion of the left shoulder, specially exacerbating at night (around 2 or 3 am). Pain usually was aggravating with movements of shoulder. Gradually the condition worsened and the majority of shoulder joint movements were restricted. Routine activities including combing hair, bathing etc was also badly affected. Patient had regular bowel and

bladder habits. Appetite was slightly reduced and sleep was altered due to shoulder pain and stiffness. Detailed Siddha examination-*envagaitheirvu* (Eightfold diagnostic methods) were done.

The patient was a known diabetic and non -hypertensive and taking hypoglycemic drugs (Glimepiride twice daily). The patient had a Past history of right breast cancer and mastectomy done before 10 years. Blood pressure (138/86 mm of Hg), pulse (80/min) and respiratory rate (22/min) were within the physiological limits. Respiratory system examination revealed bilateral adequate air entry with no added sounds. Cardio vascular system revealed normal audible S1, S2. Abdomen was soft with no tenderness, no organomegaly or no lump. All the movements at left shoulder joint were limited both actively and passively.

2.1 Investigations

Routine hematological, urine and biochemical investigations were carried out to exclude other pathology and to know the underlying cause, which were within normal limits, blood sugar level i.e. fasting & post prandial blood sugar levels were controlled. MRI revealed impingement and right supraspinatus partial tear. X-ray right shoulder AP-cervical spine shown degenerative changes.

2.2 Treatment Protocol

Patient visited weekly two times to OPD regularly for three months and *varmam* therapy was given. She continued anti-diabetic drugs also. Patient’s range of motion, strength and pain were markedly improved after the *varmam* therapy.

Brief details of given *varmam* points^[4,5] and location were given in Table 1.

2.3 Assessment criteria

On examination, upper extremity deep tendon reflexes were normal bilaterally and light touch sensation examination was unremarkable. The resisted right glenohumeral joint flexion, abduction, internal and external rotations were graded 1 /4. Patient’s right deltoid, infraspinatus, supraspinatus and teres muscles were spasmodic and tender upon palpation.

There was severe point tenderness over the right deltoid tuberosity and the rotator cuff.^[3] Visual Analogue Scale (VAS), stiffness and range of movements were assessed before and after treatment (Fig. 1, Table 2-4, Fig. 3-7).

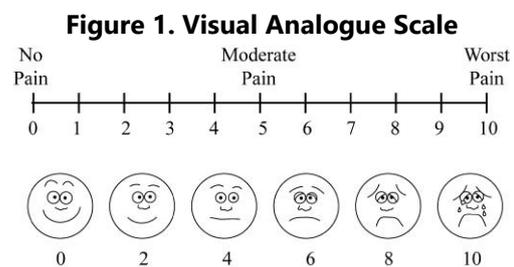


Table 1. Treatment protocol

Varmam Given	Location
Kavuli-chavvuvarmam	<i>Chavvu Varmam</i> : It lies four fingers below the shoulder joint on the inner side of the arm (between the deltoid and biceps muscle) <i>Kavuli Varmam</i> : It lies in the first web space at the junction of the bones of the thumb and the index finger.
Piratharai	It lies where the arm pit meets the back (posterior axillary fold), on both sides
Yenthi	It lies where the arm pit meets the chest (anterior fold) on both sides.
Kathirkaamavarma	It lies four fingers below <i>thummikaalam</i> (over the manubrium sterni) along the straight line of the body.
Saramudichipirithal	<i>Mudichivarmam</i> lies at the meeting point of the neck and the back bone (C7-T1 meeting point)
Kakkattaikaalam	It lies in the pit above the collar bone (supraclavicular fossa) on both sides.

Table 2. Gradation of Stiffness

Stiffness	
0	No Stiffness
1	Stiffness; no medication
2	Stiffness, relieved by external application
3	Stiffness, relieved by oral medication
4	Stiffness, not responded by medicine

Table 3. Effect of Therapy on Range of Movement-mallet score

Range of motion	Grade II	Grade III	Grade IV
Abduction	<30	30 to 90	>90
Lateral rotation	<0	0 to 20	>20
Hand to neck	Not possible	Hard	Easy
Medial rotation	Not possible	S1	T12
Hand to mouth	Marked trumped sign	Partial trumpet sign	<40 abduction

Table 4. Effect of therapy on VAS, Stiffness

	Before treatment	After treatment	After follow up
VAS	9	5	0
Stiffness	4	2	1
Range of Movement	GRADE 2	GRADE 3	GRADE 4

3.0 OBSERVATIONS AND RESULTS

Satisfactory improvement in overall functional status after ten days treatment was observed. No analgesics were needed by the patient during the treatment period and she is still in follow up. No untoward effects were noticed during the whole procedure. Pain and stiffness were relieved completely by the end of treatment (Table 4) with significant

improvement in the range of shoulder movements (Table 3) (Table 5, Fig 2-7). No aggravation in pain or stiffness was reported by the patient during follow up period even after completion of therapy. Patient now reported a VAS of 0/10. Muscle strength also improved and the muscle were graded. Patient got relief from pain and able to carry out household chores, and to eat using a utensil.^[3]

Figure 2. Improvement of the shoulder movements before and after therapy

2.1 Extension at Right shoulder joint



2.2 Abduction
at right Shoulder
Joint



2.3 During varmam treatment



4.0 DISCUSSION

This case involves multifactorial rotator cuff lesions, both extrinsic and intrinsic. Etiologies of shoulder pain can be categorized by location as either intrinsic or extrinsic. Extrinsic factors being anatomical and environmental^[6]. Environmental factors implicated include increasing age, shoulder overuse and any medical condition. Intrinsic factors encompass the range of injury mechanisms that occur within the rotator cuff itself. Chief among these is a degenerative-micro trauma model, which supposes that age-related tendon damage compounded by chronic microtrauma results in partial tendon tears that then develop into full rotator cuff tears.^[7]The shoulder is the site of many painful conditions. Because much of the symptomatology and many findings of these various conditions overlap, accurate diagnosis is dependent on a meticulous medical history and an equally thorough physical examination. Fortunately, most shoulder disorders respond to nonoperative management or may resolve spontaneously thus it can be proposed to

patient having a rotator cuff syndrome to improve their condition after conservative treatment and rehabilitation have failed even above 60 yrs.

It is generally accepted that rotator cuff repair leads to better clinical outcome but it is rarely proposed to older patients as a treatment option.^[8] Older patients are likely to be less active and may have more severely degenerated rotator cuff tendons.^[9] Limitation of the study was relatively short follow up but seems to be sufficient to assess improvement of the patient, long term progress should be recorded with more number of patients in future. To further establish this treatment protocol in rotator cuff syndrome a study involving larger sample size is needed.

5.0 CONCLUSION

Varmam therapy shows promising results in management of rotator cuff syndrome, same protocol is being followed for various RCS patients also. As the conventional therapies employed in current management of RCS are

costly with notable side effects and provide only temporary relief. *Varmam* therapy may evolve as a potential alternative for RCS management in future and it should be encouraged to serve particularly for geriatric patients. The clinical score used in this study revealed that it not only reduced pain but surprisingly provided strength to the muscles. By presenting this case report, we hope a better understanding of rotator cuff lesions and how to successfully manage with *varmam* in older patient.

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