

MANAGEMENT OF ANTERIOR CRUCIATE LIGAMENT INJURY THROUGH SIDDHA VARMAM THERAPY

M. Sri Sakthi Logisha^{1*}, G. Nivetha¹, E. Nandhini¹, M. Mohammed Musthafa²,
T. Siddhique Ali³

¹PG Scholar, ²HOD of the Department, ³Lecturer,
Department of Varmam Maruthuvam, Govt Siddha Medical College, Chennai.

Article Received on
12 Feb. 2019,

Revised on 03 Mar. 2019,
Accepted on 24 Mar. 2019

DOI: 10.20959/wjpr20195-14627

*Corresponding Author

M. Sri Sakthi Logisha

PG Scholar, Department of
Varmam Maruthuvam, Govt
Siddha Medical College,
Chennai.

ABSTRACT

The Anterior cruciate ligament tear is most common injured ligaments of knee especially in athletic peoples. This injury commonly due to hyper flexion of knee. An overall IR of 60 knee ligament injuries per 100000 people was seen in a knee injury clinic. About 50% of these ligament injuries were ACL tear, for 30 ACL tear/100000 persons, 72% patients were male and 28% were female. Now days it is mostly treated by surgical methods. Its urge to research and execute an alternative, non-invasive treatment needed for ACL injury. Here takes place, Siddha systems unique *method 'VARMAM'* for the management of ACL injuries. Varmam therapy is based on life energy termed as

'VASI'. The vasi (life energy) continuously circulating through out body. Accumulation of vasi is called *VARMA PULLIGAL*. The varmam point used in the treatment of ACL tear are *Mootu Varmam, Aga Thodai Varmam, Sirattai Varmam, Suzhi Pozhigai Varmam, Veeradagal, Viruthi Kalam, Ida Moorthi Kalam*. The above varmam therapy capable of alleviate ACL injury was easily applicable, most effective in pain management, and cost effective. This study is all about the varmam points that have been followed by Varmam department OPD, Govt Siddha Medical College. for ACL tear.

KEYWORDS: Anterior cruciate ligament tear (ACL), Siddha, Ayush, Varmam, Siddha therapy, Knee joint varmam.

BACKGROUND

The anterior cruciate ligament (ACL) is one of 2 cruciate ligaments which aids in stabilization of the knee joint.^[1] One of the most common knee injuries is an ACL sprain or

tear.^{[10][11]} Typically, injury occurs during activity/sports play that includes sudden changes in the direction of movement, rapid stopping, jumping and landing abnormally, a direct blow to the lateral aspect of the knee, or slowing down while running. The most at risk athletes for noncontact injury include soccer players, and basketball players, while the most at risk athletes for contact injury are football players.^[10]

Many people with complete tear who do not receive surgery are unable to play sports, and may develop osteoarthritis.^[11] It has been suggested that women are at increased risk of ACL injury secondary to a multitude of factors. Some studies suggest that females may have weaker hamstrings and preferential utilize the quadriceps muscle group while decelerating. When engaging the quadriceps musculature while slowing down, these places abnormally increased stress on the ACL, as the quadriceps muscles are less effective at preventing anterior tibial translation versus the hamstring muscles. A second factor that may increase the risk of ACL injury is the increased valgus angulation of the knee. One study utilizing video analysis demonstrated that female athletes are more likely to place their knees in increased valgus angulations when changing directions suddenly, which increased the stress on the ACL ligament. Lastly, it has been suggested that estrogenic effects on the strength and flexibility of tissues such as ligaments may play a role and predispose females to injury.

Multiple maneuvers are employed to test The ACL injury and include the anterior drawer, the pivot shift, and the Lachman tests. These tests should be performed whenever there is suspicion for injury to the anterior cruciate ligament.^[11]

Siddha system is the primitive system of medicine. It has 32 internal and 32 external medicines.^[2] The external therapy sub divided into invasive and non-invasive technique. *Varmam* is one among the non-invasive technique. *Varmam* otherwise called as *Marmam*, *Kalam*.^[3] *Varmam* is the systematic study of vital energy (*vasi*) in the human body. Accumulation of *VASI* is called as *VARMA THALAGAL/VARMA PULLIGAL*. Primordial points are 108 in number.^[4] The *varmam* processed by pressuring particular points at particular pressure for particular timing. Balancing life energy through stimulation of *varmam points* by various manipulation techniques.

The aim of the study is to Explore *Varmam* therapy and benefits in anterior cruciate ligament tear treatment. This article tries to explore alternative and non invasive management for anterior cruciate ligament tear.

METHODS AND MATERIALS

The following *VARMAM POINTS* are used in outpatient department *VARMAM MARUTHUVAN* department, Govt Siddha medical college, Chennai 104.

1. *MOOTU VARMAM*
2. *AGA THODAI VARMAM*
3. *SIRATTAI VARMAM*
4. *SUZH POZHIGAI VARMAM*
5. *VEERADANGAL*
6. *VIRUTHI KALAM*
7. *IDA MOORTHY KALAM*

1. MOOTU VARMAM

“மென் கணுக்காலின் மேலே மேவிய துடையின் கிழே தன் பொருத்த தனி சானு தன்மமாம் வன்மமாம்”

-வர்மவிதி⁷¹

“தானத்திலே மூட்டுசைவில் மூட்டு வர்மம்”

-வர்மா கண்ணாடி^[8]

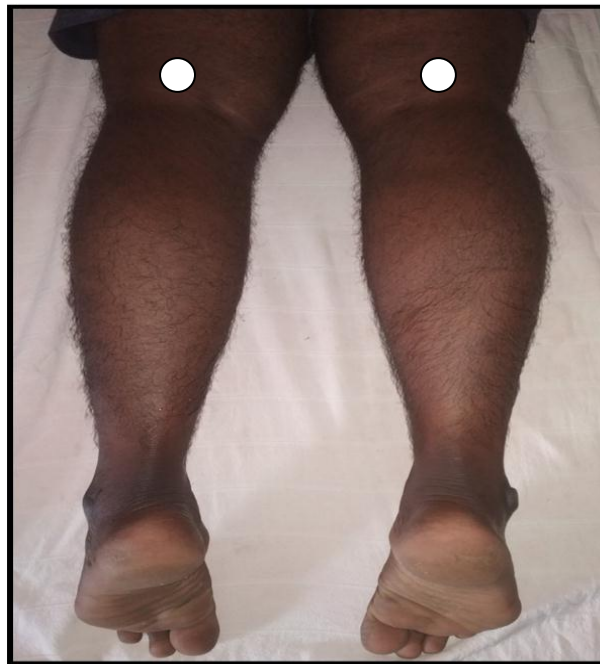


Fig 1: Location of *Mootu Varmam* in Posterior Aspect of both Knee.

Location: Centre of popliteal fossa.

Procedure: Press and release the varmam point with middle finger.

2. AGA THODAI VARMAM



Fig. 2: Location of *Aga Thodai Varmam* in Anterior Aspect of right Knee.

Location: 4 Fingers Medial and Above To Centre of Patellar Bone.

Procedure: Place Middle 3 Finger Over The Point, Pressure And Clock Wise Rotation For 18 Time.

3 SIRATTAI VARMAM

Fig 3: Location of Sirattai Varmam in Anterior Aspect of Right Knee.

Location: Around the Patellar Bone.

Procedure: Place Thumb at Lower Border Of patellar Bone Apply Gentle Pressure Clock Wise around Patellar Bone Border.

4 SUZHI POZHIGAI VARMAM

Fig.4: Location of *Suzhi Pozhigai Varmam* in Anterior Aspect of Right Knee.

Location: Just Above and Below the Patella Bone.

Procedure

1. Place Both Thumps Transversely Below Patella, Apply Pressure And Move Side Wards.
2. Place Both Thumb Above Patella, Apply Upwards and Forwards Pressure.
3. Fix Index And Thumb Finger On Above And Below of Patella Then Compress The Patella By Giving Opposing Pressure And Release.

5 VEERADANGAL

Fig 5: Location of *Veeranangal* in medial Aspect of Right Knee.

Location: 4 Fingers above Popliteal Fossa on Posterior Aspect of Thigh.

Procedure: Place Middle 3 Finger of Both Hands Then Press Gently, Ask The Patient To Flexion And Extension Of Knee Joint.

6 VIRUTHI KALAM

“வெல்லுவார் பெருவிரலுக்கு மேலிறை ஒன்றில் விருத்தி”

- வர்மா லாட சூத்திரம்⁹¹



Fig 6: Location of *Viruthi kalam* in Anterior Aspect of Right Ankle.

Location: Web area in-between great toe and second toe.

Procedure: Place the Thumb, Pressure Upwards And laterally Then Ask the Patient to Flexion and Extention of Knee Joint.

7 IDA MOORTHY KALAM

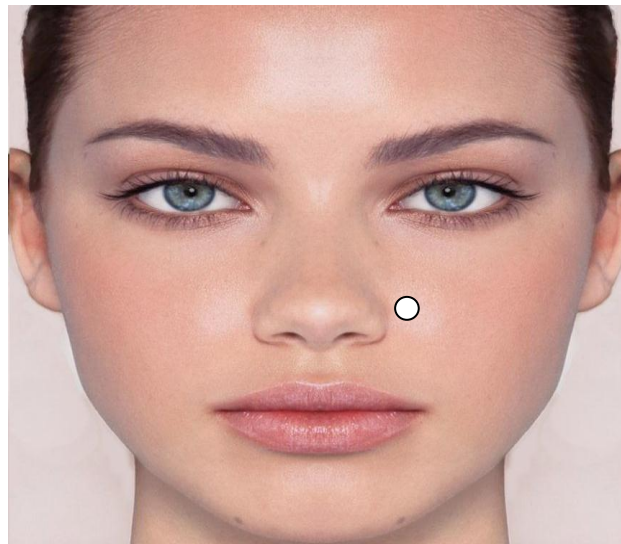


Fig 7: Location of *Ida Moorthy Kalam* in face.

Location: At Left Naso-Labial Fold.

Procedure: Using Centre Of Thumb Over The Point Pressure Upwards.

Table 1: Siddha Varmam Therapy-Location of Varmam points and its procedure.

NAME OF VARMAM POINTS	Location	Procedure	Finger Selection	Duration	Patients Posture	Pressure	Frequency
MOOTU VARMAM	Centre Id Popliteal Fossa	Press And Release The Varmam Point With Middle Finger	Middle Finger	10 Seconds	Sitting, Lying	¼ Mathirai	3 Times
AGA THODAI VARMAM	4 Fingers Medial And Above To Centre Of Petallar Bone	Place Middle 3 Finger Over The Point, Pressure And Clock Wise Rotation For 18 Times	Middle 3 Finger	30 Seconds	Sitting	¼ Mathirai	18 Times
SIRATTAI VARMAM	Around The Patellar Bone	Place Thumb At Lower Border of patellar Bone Apply Gentle Pressure Clock Wise Around Patellar Bone Border	Thumb	30 Seconds	Sitting/ Lying	¼ Mathirai	3 Times
SUSHI POZHIGAI VARMAM	Just Above And Below The Patella Bone	1. Place Both Thumbs Transversely Below Patella, Apply Pressure And Move Side Wards 2. Place Both Thumb Above Patella, Apply Upwards And Forwards Pressure 3. Fix Index And Thumb Finger On Above And Below of Patella Then Compress The Patella By Giving Opposing Pressure And Release	Thumb And Index Fingers	60 Seconds	Sitting/ Lying	¼ Mathirai	3 Times
VEERADANGAL	4 Fingers Above Popliteal Fossa On Posterior Aspect Of Thigh	Place Middle 3 Finger Of Both Hands Then Press Gently, Ask The Patient To Flexion And Extension Of Knee Joint	Middle 3 Finger	30 Seconds	Sitting, Lying	¼ Mathirai	3 Times
VIRUTHI KALAM	Web Area In-Between Great Toe And Second Toe	Place The Thumb, Pressure Upwards And laterally Then Ask The Patient To Flexion And Extension Of Knee Joint	Thumb Finger	30 Seconds	Sitting /Lying	¼ Mathirai	3 Times
IDA MOORTHI KALAM	At Left Naso-Labial Fold	Using Centre Of Thumb Over The Point Pressure Upwards	Thumb Finger	20 Seconds	Sitting	¼ Mathirai	1 Time

RESULT AND DISCUSSION

Anterior cruciate ligament tear is most common ligament tear rather than other ligament tear of knee. In approximately 50% of cases other structures of knee such as surrounding cartilages, bone and ligaments are also damaged.^[10]

The mechanism of ACL tear often involves a rapid change in direction, sudden stop, incorrect landing in jump. The incidence prone to athletics, particularly soccer, foot ball and basketball players.^[11] Injuries of ligament is consider “sprain” and grades on the severity scale. In grade 1 sprain ligament slightly stretched, In grade 2 sprain stretches the ligament to the point where it became loose, grade 3 sprains is most commonly referred to complete tear of ligament.^[10] Female are 2-8% predominate in ACL tear than men due to active muscular protection of knee joint, difference in leg/pelvis alignment, difference in activity of estrogen and relaxin hormone.^{[12][13]}

Varmam therapy is Cost effective treatment without invasive procedures, quick healing approaches along with traditional and cultural believes tend to attract the patient towards traditional varmam therapy. Fear of prolonged immobilisation with POP, sophisticated orthopaedic treatment, post-surgical complications and high cost makes the patient to Seek traditional siddha varmam therapy. The relative merits of conservative and surgical managements of ACL injuries are controversial, surgery is said to be superior. Even though, the internal fixation is often made using steel wires, hollow lag screws and absorbable screws, the fixing of thin, small or commuted fragments is still lacking.^[6]

In Siddha Medicine, the term Varmam indicates the life energy (*VASI*) which remains concentrated in certain specific points in our body. Varmam points are stimulated gently with the fingers. The pressure varies from $\frac{1}{4}$ unit, $\frac{1}{2}$ unit, $\frac{3}{4}$ unit to 1 unit/2 units (unit = *Mathirai*). *Siddha Varmam* therapy (SVT) specifies the therapeutic manipulation of certain points in which the life energy is found concerted. Handling on these points with a particular force for the definite time will release the life energy from these points and fetch relief to the affected individual by regulating the flow of life energy which is blocked due to attack on particular *Varmam* points or due to other causes.^[14] The changes occurring in the body on hitting /manipulating some specific points directly or indirectly with a particular force is also known as Varmam. The signs and symptoms manifesting in the body varies with

the location of the points, force of hitting, duration of pressure and the physical strength of the patient.^[6]

Varmam Therapy is the pressure manipulation over these points with a particular force for the specified time. This will regulate the flow of pranic energy(VASI) which is obstructed due to assault on these points (Varmam points) or due to any other causes. With this article we substantiate that the management through *SIDDHA VARMAM* treatment was effective in Acl tear.

CONCLUSION

The above varmam therapy capable of alleviate ACL injury was easily applicable with invasive procedure cost effective, quick healing approaches along with traditional and cultural believes tend to attract the patients towards Traditional Varmam therapy.

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