

International Journal of Current Research in Medical Sciences

ISSN: 2454-5716 (A Peer Reviewed, Indexed and Open Access Journal) www.ijcrims.com



**Case Report** 

Volume 8, Issue 5 -2022

**DOI:** http://dx.doi.org/10.22192/ijcrms.2022.08.05.001

# Management of knee joint ligament injury in siddha external medicine -A case report

J Priya<sup>1</sup>, A Subashree vadivoo<sup>2</sup>, G Sekar<sup>3</sup>, M Kannan<sup>4</sup>

PG Scholar ,Department of Pura Maruthuvam , Government Siddha Medical College Chennai 106<sup>1</sup>

PG Scholar , Department of Pura Maruthuvam , Government Siddha Medical College Chennai -106  $^{\rm 2}$ 

Head of the Department, Pura Maruthuvam , Government Siddha Medical College

Chennai -106

Lecturer, Pura Maruthuvam, Government Siddha Medical College

Chennai -106<sup>4</sup>

#### Abstract

The knee is one of the largest and most complex joint in the body. The two cruciate ligaments in the knee, anterior and posterior, are often referred to as the 'crucial' ligaments, because of their importance in providing knee stability. Anterior cruciate ligament (ACL) injury is one of the most seen injury in sports and has a devastating influence on patient's activity level and quality of life. Here is a case report of a 36-year-old male from Chennai reported to the Siddha external therapy OPD in Government Siddha Medical College attached to Arignar Anna Government Hospital of Indian Medicine (AAGIM) on 26.1.2022 with chief complaints ,pain , mild swelling, tender, restriction of movement since 1 month. He was given Siddha external therapies such as Pattru (Poultice), Kattu (Bandage) ottradum(Fomentation). The pain was assessed using visual analogue score before and after treatment. The patient was able to return to his daily activities without instability and also got relieved from pain with noticeable improvement in the movement of knee joint.

Keywords: Knee joint, Ligaments, Siddha external medicine, Pain, Case study.

# Introduction

The knee is one of the primary weight bearing joint of the body. The price of its mobility is a tendency to instability. It is also one of the most commonly injured joints as it is easily subjected to external forces, because of its anatomic structure and also due to the functional demands laid upon it. The stability of knee joint is maintained by the ligaments, tendons and the associated muscles. Cruciate ligaments plays on important role in maintaining the stability of the knee. The anterior cruciate ligament is more commonly injured and its injury is more disabling. The common clinical findings after an ACL tear are restricted movements mainly in extension, diffuse mild tenderness on knee. Usually the Lachman's test is positive and also is very reliable in ACL rupture. The anterior drawer test and pivot shift test may also be positive in most of the cases of ACL tear. PCL tears are less common. Clinically the posterior drawer sign is positive. The semilunar cartilages are commonly called menisci, which helps in the smooth functions of the knee .Injuries to the meniscus are common in young adults. Joint line tenderness , pain with squatting ,positive Mc Murray test , positive Apley compression distraction test are all indicative of meniscal injury.

Siddha medicine is mainly categorized into two classes , based on their administration of drug which are 32 types of Internal medicine & 32 types External medicines for treating the 4448 diseases described in the Siddha texts.

## **Details :**

A 36-year-old male from Chennai, reported to the Siddha external therapy OPD in Arignar Anna Government Hospital of Indian Medicine (AAGIM) on 26.1.2022 with chief complaints pain , tender ,restriction of movements since 1 month. Pain increases on walking, during flexion and extension of knee.

History of complaints : The patient have a history of sustaining a twisted movement in his left knee while playing football. After that he was unable to walk due to pain, and the swelling developed within one hour.

## **Diagnostic focus**

**X-ray** : There was no radiologically detectable fractures

## MRI Left knee

) Partial tear of ACL with buckling of posterior cruciate ligament.

) Small horizontal tear involving the posterior horn body of medial meniscus.

Grade I strain medial collateral and petellofemoral ligament.

## **General examination**

- *J* Gait: Normal
- ) Vital signs : normal
  - He had no other associated systemic illness.

) On detailed examination no associated neurological deficits were seen.

## Treatment procedure

Internal medications -	Amukara chooranam
-2gm (bd-after food)	

External medicine :

Procedure for patru:

For the first five days, equal amount of Moosambaram powder and black gram flour were mixed with egg white and applied on the left knee joint. It was allowed to dry for three hours. After that it is washed with luke warm water. After 5 days the swelling is reduced.

Procedure for ottradam:

Assemble the required materials and explain the procedure to the patient. Take 25 *Erukku* (*Calotropis gigantea*) leaves and clean them. Place them one above the other and roll them to tie them together. Cut one end so as the milky latex of the leaves comes out. It is then dipped in the hot neem oil . This is used for fomentation the affected region. From sixth day - Leaves of Erukku (Calotropis gigantia) with Neem oil was used for fomentation in the affected area for 30 minutes.

Procedure for kattu

Then a clean sterile cotton cloth was taken and smeared with Murivennai thoroughly. It is then applied as kattu(compressive bandage) in the left knee joint.

## **Treatment duration:**

Musambara pattru(Poultice) – 5 DAYS

Erukku Elai ottradam (Fomentation) and Kattu with Murivu Ennai(Bandage) – 40 days (Alternative days)

## **Treatment period :** 45 days

#### Int. J. Curr. Res. Med. Sci. (2022). 8(5): 1-4



## Follow –up

After 45 days, the patient was followed for 1 month for any recurrence. Ulunthu thylam was prescribed during the follow-up period.

#### Outcome

The outcome assessment Before & After treatment is given in the table 1.

Table 1	Before treatment	After treatment
Inspection		
Swelling	Mild	Swelling Absent
Contusion / bruising	Absent	Absent
Palpation		
Warmth	Nil	Nil
Tenderness	Grade- 1 medial compartment	Grade- 0 medial compartment
Range of movements		
Flexion	40-degree limitation in terminal flexion	120-degree limitation in terminal flexion
Extension	20-degree limitation in terminal	0-degree limitation in terminal
VAS scale for pain on		
movements	Score- 6	Score- 3
Lachman test	Positive	Negative
Mc Murray test	Positive	Negative
Anterior drawer test	Negative	Negative
Posterior drawer sign	Negative	Negative
Valgus stress test	Negative	Negative
Varus stress test	Negative	Negative

# Discussion

In this case study, a 36 years old male with symptoms of pain ,swelling , tenderness, restricted range of movements present in the left knee joint since 1 month. He responded well to external therapy treatment .The pain score by VAS was 6/10 before treatment. The swelling in left knee joint was reduced. The pain score came down to 3/10 after external therapy treatment. The joint line tenderness also reduced after treatment The patient was able to walk around 2k.m without pain in left leg. Moosambaram patru reduced the swelling. Murivu ennai is indicated in Agasthiyar Odivu Murivu Sasthiram for fracture and dislocation. It is well known for reducing pain, and helps in faster healing. Erukku (Calotropis gigantia) has Anti-inflammatory and Analgesic activity. The pain and swelling is reduced because of this properties. Also, the application of ulunthu thylam during the follow – up period restores the movement in the left knee and provide lubrication to the left knee joint. Thus combination of external treatment provided good result in knee joint ligament tear.

# Conclusion

From the present case study it can be concluded that the combination of external treatments (Moosambara pattru(Poultice)/Erukku ottradum (Fomentation)/Murivu ennai kattu(Bandage) is a promising Siddha external therpy for management of knee joint ligament injury.

# References

- 1. Harsh Mohan ,Textbook of pathology,6<sup>th</sup> edition, Jaypee Brothers Medical Publisher (p) ltd ,New delhi,2010;p.843.
- 2 Mayil Vahanan Natarajan , Textbook of Orthopaedics and traumatology ,8<sup>th</sup> Edition ,2018, p.381.383.
- 3. Akashthiyar Odivu murivu shashthiram
- 4. Kaa.soo. Murugesha Muthaliyar ,Siddha Materia Medica (Medicinal plant devision),2<sup>nd</sup> edition, Chennai , Directorate of Indian Medicine And Homeopathy 2005.
- 5. Dr.K.N.kuppusamy muthaliar, Dr.K.S. Uthamarayan, Siddha vaithiya thirattu ,2014.
- 6. Saba AB, Oguntoke PC, Oridupa OA. Anti-inflammatory and analgesic activities of ethanolic leaf extract of Calotropis procera. African Journal of Biomedical Research. 2011;14(3):203-8.

Access this Article in Online		
	Website:	
	www.ijcrims.com	
	Subject: Siddha Medicine	
Quick Response Code		

How to cite this article:

J Priya, A Subashree vadivoo, G Sekar, M Kannan. (2022). Management of knee joint ligament injury in siddha external medicine -A case report. Int. J. Curr. Res. Med. Sci. 8(5): 1-4. DOI: http://dx.doi.org/10.22192/ijcrms.2022.08.05.001