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EFFECTIVENESS OF VARMAM THERAPY FOR THE MANAGEMENT OF OSTEOARTHRITIS

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ABSTRACT: Siddha system of medicine is the ancient traditional medicine practiced all over Tamil Nadu. Siddha system is bestowed with various specialities of few which are Varmam, Pranayamam, Yoga and Kayakarpam. This system has a vast repository of internal and external medicines; Varmam is one among such therapies used to treat multiple ailments, especially related to musculoskeletal and neurological deficits. Varmam is the vital life energy points located in human body and was identified as 108 points by the Siddhars. Here the Varmam treatment for Azhalkeelvaayu (Osteoarthritis), one of the types of Keelvaayu mentioned in the Siddha Noi naadal book is evaluated in a small group of patients. Among the elderly knee Osteoarthritis is leading cause of chronic disability in developed countries. Osteoarthritis (OA) is the second most common rheumatologic problem and is most frequent joint disease with prevalence of 22% to 39% in India. A study was done on 30 clinically diagnosed patients of osteoarthritis (knee joint). Such patients who underwent Varmam therapy are observed and results are presented. The results showed significant effect of Varmam therapy for the management of Osteoarthritis which is evident from the p value (P=1).

INTRODUCTION: Osteoarthritis (OA) is a type of joint disease that results from breakdown of joint cartilage and underlying bone.¹ Osteoarthritis is the most common form of arthritis with disease of the knee and hip affecting about 3.8% of people as of 2010.² Among those over 60 years old, about 10% of males and 18% of females are affected.³ It is the cause of about 2% of years lived with disability.⁴ In Australia, about 1.9 million people are affected, and in the United States, 30 to 52.5 million people are affected.⁵

It becomes more common in both sexes as people become older. Osteoarthritis in the knee begins with the gradual deterioration of cartilage. Without the protective cartilage, the bones begin to rub together, causing pain, loss of mobility, and deformity.⁶ It affects approximately 16 million people. The majority of arthritis cases involving the knee are osteoarthritic cases.

It is not always certain why arthritis of the knee develops. Most physicians believe that it is a combination of factors that can include muscle weakness, obesity, heredity, joint injury or stress, constant exposure to the cold, and aging. Cartilage in the knee begins to break down and leaves the bones of the knee rubbing against each other as you walk. Persons who work in a place that applies repetitive stress on the knees are at a high risk of developing this condition.

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Bone deformities increase the risk for osteoarthritis of the knee since the joints are already malformed and may contain defective cartilage. Having gout, rheumatoid arthritis, Paget's disease of bone or septic arthritis can increase your risk of developing osteoarthritis. Osteoarthritis symptoms often develop slowly and worsen over time. Signs and symptoms of osteoarthritis include: Pain, Tenderness, Stiffness, Loss of flexibility, Grating sensation, Bone spurs.⁷

In Siddha the symptoms of Osteoarthritis is similar to Azhal keel vaayu. The complete remedy of these diseases is still not available in modern medicine. The drugs used mainly are analgesic, anti-inflammatory and steroids, which can't spell out the disease but are only symptomatic, on the other hand furious side effect like Gastritis, Ulceration of mucosal layer of stomach, heart burn and Vomiting are added as the unwanted results.

Varmam also called as marmam, indicates the therapeutic stimulation of specific points in which pranic energy is found concentrated. Varmam therapy which is drugless, non invasive, cost effective, simple therapy is very effective for the management of osteoarthritis. Varmam is a specialized field of Siddha pertained to cure neurological weakness, neuromuscular problems, migraine headaches, convulsions, arthritis, spinal problems, muscle wasting and to wail intense pain. The therapy time is less and when properly complied to, gives long lasting results.

Hence an attempt has been done to prove the efficacy of Varmam therapy for the management of osteoarthritis.

Aims and Objectives: To evaluate the efficacy of Varmam in the management of Azhal keel Vaayu (Primary Osteoarthritis of Knee joint)

MATERIALS AND METHODS: Patients with Clinically diagnosed primary osteoarthritis of knee joint who are willing to undergo the varma treatment were selected and asked to visit OPD of Ayush wellness clinic for 48 days of Varmam therapy point stimulation. Totally 30 Patients with different age group, gender, and socio-economic status were randomly selected, on the basis of following criteria.

Inclusion Criteria:

1. Patients of both sex between the age group 30 to 60yrs.
2. Patients with the signs and symptoms of Primary osteoarthritis of knee joint.

Exclusion Criteria:

1. Patients below age 30yrs and above 60yrs of either sex.
2. Secondary Osteoarthritis of knee joint.
3. Rheumatoid arthritis & Gouty arthritis.
4. Pregnant women.
5. Patients having other Systemic disorder.
6. Patients having severe osteoarthritic changes.

Methods: Stimulation of varma points for 48 days.

Varma Points:

1. **Chippi Varmam:** Situated 6 finger breaths below Saramudichu, 3 finger breaths lateral on either side.
2. **Uppukuttri Varmam:** Situated 3 finger breaths above posterior aspect of the heel.
3. **Kuthikaal Varmam:** Situated 7 finger breaths above posterior aspect of the heel.
4. **Viruthi kaalam:** Situated between big toe and adjacent in its dorsal aspect.
5. **Komberi kaalam:** Situated 8 finger breaths above medial malleolus.
6. **Naai thalai Varmam:** Situated 3 finger breaths below knee joint.
7. **Kaal moottu Varmam:** Situated in centre of the popliteal fossa.
8. **Veeradangal:** Situated 4 finger breaths above kaal moottu Varmam.

Each varma point will be stimulated with pressure mentioned in text and may vary according to patients pirakuruthi (body constitution).¹⁶

Assessment Criteria: The symptoms of Osteoarthritis of knee joint and joint activity were taken for the assessment results of Varmam therapy. Following parameters were taken in account.

Grading of assessment criteria: A. Severity of pain (VAS scale): Severity of pain can be assessed by the following Visual Analogue Scale. ⁸

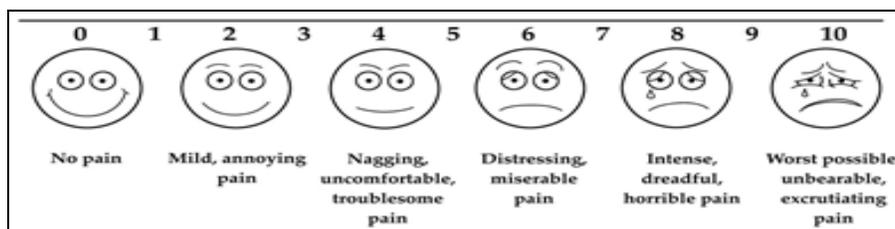


FIG. 1: SEVERITY OF PAIN

B. Tenderness:

TABLE 1: ASSESSMENT CRITERIA FOR TENDERNESS ^{9, 10, 11}

S.no	Grading of Tenderness	Score
1	No pain on pressure	0
2	Tenderness with no physical response	1
3	Tenderness with grimace, wince, and/or flinch	2
4	Tenderness with withdrawal (positive jump sign)	3
5	Non-noxious stimuli (e.g., superficial palpation, gentle percussion) results in patient withdrawal or patient refusal to be palpated due to pain	4

C. Swelling:

TABLE 2: ASSESSMENT CRITERIA FOR SWELLING ¹²

S.no	Grading of Tenderness	Score
1	No Swelling	0
2	Swelling may not be apparent on casual inspection, but recognizable to an experienced examiner	1
3	Swelling obvious even on casual observation	2
4	Markedly abnormal swelling	3
5	Swelling to a maximally abnormal degree	4

D. Range of Motion (R.O.M.) (By Goniometer): Assessed on following grading system.

TABLE 3: ASSESSMENT CRITERIA FOR RANGE OF MOTION

S.no	Grading of Tenderness	Score
1	0-130 degree	0
2	129-90 degree	1
3	89-60 degree	2
4	59-30 degree	3
5	30-0 degree	4

RESULTS:

TABLE 4: OVERALL EFFECT ON THE ASSESSMENT CRITERIA

S.no	Assessment Criteria's	Before Varma therapy (n=30) Mean ±S D	After Varma therapy (n=28) Mean ± S D	T- value	P- value
1	Severity of pain (VAS scale)	3.63 ±1.42	1.8±0.66	6.36	P=1
2	Tenderness	2.46±0.86	1.16±0.59	6.75	P=1
3	Swelling	2.73±0.69	1.25±0.75	6.43	P=1
4	Range of motion	2.68±0.86	1.28±0.58	7.31	P=1

The results were significant (p=1) with respect to the assessment criteria

DISCUSSION: Maximum patients 43.33 % were found in age groups of 51 to 60 years followed by 40 % patients from 41 to 50 years of age group and 16.66% patients from 31 to 40 yrs. This study shows that this disease is more prevalent in age

group 51 to 60 years. Vatham is predominant in this age group; This supports the literature about risk factor of OA. (Harrison’s internal medicine 17th edition 2008)

In the study females were found affected more than male. 60% were females and 40% were males. The disease osteoarthritis is itself more common in women. Osteoarthritis seems to run in families, and there appears in particular to be a genetic link among women. After menopause, when women's estrogen levels go down, they lose that protection and may have a higher risk of developing osteoarthritis even if they are on hormone-replacement therapy (HRT). Statistics show that more women than men are obese or severely obese, and obesity plays a major role in osteoarthritis.¹³ This has been reflected in the study also. 95% of cases were non-vegetarian. The general population status is reflected in the study population and no specific inference could be made with respect to the study.

After 48 days of treatment of Varma therapy the results showed clinical improvement which is evident from the assessment parameters (P =1). The results regarding pain, stiffness, swelling and range of movements were really encouraging. Varmam therapy relieves pain effectively may look like a magic. But in true it was built on a basic human anatomy and scientific manipulation techniques written mostly by Siddhars.

In Siddha theory diseases are caused by the derangements of three humors. The derangement of Vatham is responsible for pain. Varmam is one among the Siddha therapies by which the pain is managed by stimulating Varma points. The Varma energy pathway can be correlated scientifically with the physiological analgesic pathway (Brain opiate system) and the reviews by which the release of neuromodulators such as Endorphins, Enkephalins and dynorphins are recorded under massage or touch therapy.¹⁴

Osteoarthritis is the cause of about 2% of years lived with disability, since only anti-inflammatory, analgesics cannot control the disease, certain non pharmacological therapies such as Varmam plays a crucial role for the management of Osteoarthritis. In some cases drugs mentioned for Azhal Keel Vaayu such as Amukkara Chooranam, Arumuga Chendooram, Sangu Parpam and external applications such as Pinda thylam, Vatha kesari thylam can also be administered along with Varmam therapy.

CONCLUSION: Varma treatment regime has been very effective for the management of Osteoarthritis. Treatment with Varmam application alone can be tried in near future to substantiate the effect of Varmam on pain management of osteoarthritis.

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REFERENCES:

1. Atlas of Osteoarthritis. Springer. 2015. p. 21. ISBN 9781910 315163.
2. Cross, M; Smith, E; Hoy, D; Nolte, S; Ackerman, I; Fransen, M; Bridgett, L; Williams, S; Guillemin, F; Hill, C. L.; Laslett, L. L.; Jones, G; Cicuttini, F; Osborne, R; Vos, T; Buchbinder, R; Woolf, A; March, L: "The global burden of hip and knee osteoarthritis: Estimates from the global burden of disease 2010 study". *Annals of the Rheumatic Diseases*. 2014; 73 (7): 1323 30. doi:10.1136/annrhumdis-2013-204763. PMID 24553908.
3. Glyn-Jones, S; Palmer, AJ; Agricola, R; Price, AJ; Vincent, TL; Weinans, H; Carr, AJ: "Osteoarthritis.". *Lancet*. 2015; 386: 376–87. doi:10.1016/S0140-6736(14)608023. PMID 25748615. Jump up.
4. March L, Smith EU, Hoy DG, Cross MJ, Sanchez-Riera L, Blyth F, Buchbinder R, Vos T, Woolf AD: "Burden of disability due to musculoskeletal (MSK) disorders". *Best Pract Res Clin Rheumatol*. 2014; 28 (3): 353 66.doi: 10.1016/j.berh.2014.08.002. PMID 25481420.
5. "Arthritis-Related Statistics: Prevalence of Arthritis in the United States". Centers for Disease Control and Prevention, US Department of Health and Human Services. 9 November 2016.
6. <http://www.webmd.com/osteoarthritis/healthtool-osteoarthritis-affects-your-knee>.
7. <http://www.mayoclinic.org/diseases.../osteoarthritis/symptoms-causes/dxc-20198250>.
8. https://www.researchgate.net/figure/259499877_fig1_Visual-analogue-scale-VAS-for-assessment-of-children%27s-pain-perception.
9. Cipriano JJ. *Photographic Manual of Regional Orthopaedic and Neurological Tests* (5th edition), Lippincott Williams & Wilkins, Philadelphia, 2010.
10. Hubbard D, Berkoff GM. Myofascial trigger points show spontaneous needle EMG activity. *Spine* 1993; 18(13): 1803-07.
11. Magee DJ, *Orthopedic Physical Assessment*, WB Saunders, Philadelphia, 6th edition, 2014.
12. <http://www.meddean.luc.edu/lumen/MedEd/medicine/pdx1/muscle/handout.htm>
13. <http://www.everydayhealth.com/osteoarthritis/osteoarthritis-and-gender.aspx>

14. Hall, John E. (John Edward), Guyton and Hall textbook of medical physiology. Philadelphia, PA: Saunders Elsevier, 13th Edition, 2016.
15. Manimaran G, Renuka K, Sugan M. Pothuvana pathu Noigalai Neekum Varma Maruthuva anubavamuraigal. Published in The Fingerprints of Varmam. Chennai: Central council for research in Siddha; 2015.
16. Thiyagarajan R. Siddha Maruthuvam Sirappu. Chennai: Commissionarate of Indian Medicine and Homoeopathy; 1st edition. 2013.
17. Shanmugavelu, Noi Naadal Noi Mudal Naadal Thirattu. Department of Indian Medicine & Homoeopathy, Chennai. Part - II, 2nd Edition.

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