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Original Research Paper

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MANAGEMENT OF JANU SANDHIGATAVATA (OSTEOARTHRITIS OF KNEE JOINTS) THROUGH AYURVEDA PROTOCOL- A SINGLE CASE STUDY

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ABSTRACT

Introduction: Knee osteoarthritis (OA) is a chronic degenerative disorder correlating with Sandhigata Vata in Ayurveda. Agnikarma is a classical intervention indicated for chronic pain and Vata-Kapha predominant disorders. Yogaraja guggulu is given with Agnikarma to evaluate the result. Yogaraja guggulu and Balamoola Kwatha are mentioned in most Ayurvedic classics for the treatment of sandhigatavata. The report presents a modified method of Agnikarma aimed at improving safety, precision, and clinical outcomes. **Case Summary:** A 58 years old female with bilateral knee OA (Grade II–III) underwent the oral medicine and modified Agnikarma procedure using Arkapatra and flaming cotton swab hold by artery forceps. Assessments were done using VAS and WOMAC scales. Remarkable reduction in pain and stiffness was observed within 15 days. **Discussion & Conclusion:** The modified Agnikarma method along with Yogaraja Guggulu proved effective and safe in reducing pain and improving function in knee OA. This modified technique may help standardize Agnikarma practice and enhance clinical outcomes. **Conclusion:** Modified method of Agnikarma & Yogaraja Guggulu along with Balamoola Kwatha were useful in sandhigatavata.

KEYWORDS : Agnikarma, Osteoarthritis, Sandhigata Vata, Ayurveda, Pain management.

INTRODUCTION

Osteoarthritis (OA) of the knee is one of the most prevalent degenerative joint diseases, presenting with pain, stiffness, crepitus, and reduced mobility. In Ayurveda, knee OA corresponds to Sandhigata Vata, characterized by shoola, stambha, and vatapurna druti sparsha.

Agnikarma, described in classical texts such as Sushruta Samhita, is highly effective for chronic Vata-Kapha disorders. However, traditional Agnikarma methods vary widely, this case report explores a modified method of Agnikarma focusing on safety, precision, and improved patient comfort.

Any type of pain cannot be produced without the presence of Vata Dosha. Sandhi is one of the Marma, and there is the involvement of Madhyama Roga Marga, Vata Dosha, and Dhatukshaya which make the disease Kashtasadhya.

In Ayurveda, treatment of Sandhigata Vata including Snehana (Bahya and Abhyantara), Upanaha, Agnikarma, Bandhana, and Unmardana are indicated by Susruta Samhita. Most of the treatment modalities described are local treatment procedures to be performed on the affected Joint.

Osteoarthritis is the second most common rheumatologic problem and it is the most frequent joint disease with a prevalence of 22% to 39% in India. OA is more common in women than men.

It is found in routine Ayurvedic practice that patients of osteoarthritis do not get satisfactory relief in signs and symptoms with routine anti Vata treatment. Sushruta Samhita has mentioned that disease conditions which are not benefited by Bhaishaja, Shastrakarma and Ksharakarma can be treated by Agnikarma Chikitsa. It has also mentioned that, diseases which are treated by Agnikarma Chikitsa, have least recurrence. Hence modified method of Agnikarma Chikitsa is being applied in the patients of osteoarthritis.

This method includes use of Arkapatra and flaming cotton swab hold by artery forcep. The location for Agnikarma is decided by finding most tender point on knee joint. The point is covered with an Arkapatra. Then a flaming cotton swab soaked in spirit is kept on it till patient feels burning sensation moderately on that point. Patient was clinically assessed before and after the treatment.

Diagnosis Criteria

Diagnosis was on the basis of presence of Signs and symptoms of Sandhigatavata, VAS (Visual Analogue scale) and WOMAC Scale.

Signs and Symptoms of Sandhigatavata

1. Sandhishoola (pain in joints)
2. Sandhishotha (inflammation in joints)
3. Sandhi stambha (stiffness in joint)
4. Akunchana prasarane vedana (pain while flexion and extension)
5. Sandhisphutana (crepitation)

Table No 1 Diagnostic Criteria

Sr. No.	Symptoms	Grade-0	Grade-1	Grade-2	Grade-3	Grade-4
1	Sandhi-shoola	No pain	Mild pain	Moderate pain but no difficulty in walking	Slight difficulty in walking due to pain	Severe difficulty in walking
2	Sandhi shotha	No swelling	Slight swelling	Moderate swelling	Severe swelling	--
3	Sandhi stambha	No stiffness	mild stiffness	Moderate stiffness	Severe difficulty due to stiffness	Severe stiffness more than 15 min.
4	Sandhi sphutana	No crepitus	Palpable crepitus	Audible crepitus	--	--

5	Akunchana prasarane vedana	No pain	Pain without winching of face	Pain with winching of face	Prevent complete flexion	Does not allow passive movement

Objective Criteria- WOMAC SCALE

Table 2 --- WOMAC Scale

Pain When	None	Slight	Moderate	Severe	Extreme
Walking	0	1	2	3	4
Climbing stairs	0	1	2	3	4
Sleeping at night	0	1	2	3	4
Resting	0	1	2	3	4
Standing	0	1	2	3	4
STIFFNESS					
Morning	0	1	2	3	4
Evening	0	1	2	3	4
Rate Difficulty When					
Descending stairs	0	1	2	3	4
Ascending stairs	0	1	2	3	4
Rising from sitting	0	1	2	3	4
Standing	0	1	2	3	4
Bending to floor	0	1	2	3	4
Walking on even floor	0	1	2	3	4
Getting in /out of car	0	1	2	3	4
Going shopping	0	1	2	3	4
Putting on socks	0	1	2	3	4
Rising from bed	0	1	2	3	4
Taking off socks	0	1	2	3	4
Lying in bed	0	1	2	3	4
Sitting	0	1	2	3	4
Getting on/off toilet	0	1	2	3	4
Doing light domestic duties (cooking, dusting)	0	1	2	3	4
Doing heavy domestic duties (moving furniture)	0	1	2	3	4

CASE REPORT

Patient Profile

A 58 years old female patient came to Panchkarma OPD of Goenka Ayurved Hospital, Piplaj, Gandhinagar, Gujarat with chief complaints of Sandhishoola (Bilateral knee joint pain), Sandhi shotha (Bilateral knee swelling), Sandhi Stambha (Stiffness), Sandhi Sphutana (Crepitations) and Akunchana prasarane Vedana (pain in physical activities). Patient was suffering since 2 years. The patient reported chronic knee pain aggravated by walking and stair climbing, partially relieved by NSAIDs and physiotherapy. No comorbidities such as diabetes or hypertension were present. No any past surgical history noted by the patient.

Table- 3: Personal History:

Age- 58 years	Sleep- Disturbed	Prakruti- Vata-Kaphaja
Sex- Female	Appetite- Good	BP- 124/80 mmhg
Marital status- Married	Stool- Regular (1 Time/day)	Weight- 62 Kg
Occupation- Housewife	Urine- Normal (5-6 Times/day)	Height- 160 Cm
Bala- Madhyam	Addiction- None	Temperature- 98.6 °F

Table- 4: Ashtavidha Pareeksha

Nadi- 80/ Min, Vata-Pittaj	Shabda- Clear
Mutra- Normal	Sparsha- Normal
Mala- Regular	Drik- Normal
Jihva- Nirama	Akruti- Madhyama

Clinical Findings

- Medial joint line tenderness (Grade 2)
- Mild swelling
- Restricted flexion beyond 90°
- Crepitus present on bilateral knee
- Sandhigatavata lakshana: sandhishoola, stambha, Shotha, Akunchana Prasarane Vedana

Baseline Scores (Before Treatment):

- VAS: 8/10
- WOMAC: 62/100

Intervention

1. Modified Agnikarma Technique

Equipment and Materials

- Arkapatra (Leaves of Calotropis procera)
- Cotton Spirit swab
- Sponge holding Forcep
- Aloe vera gel

Method

Instead of hot Shalaka, flaming cotton swab hold by artery forceps and Arkapatra are used for Agnikarma in this method. The point for Agnikarma is decided by finding most painful point on body surface. The point is covered with an Arkapatra. Then a flaming cotton swab soaked in sprit is brought close to cover the point and kept on it till patient feels burning sensation moderately on that point. Care is to be taken about that the patient's cutaneous sensation should be normal. It is not being kept so long that patient's skin gets burn. Flame should not come in direct contact of surrounding skin or any other body part. The procedure will be continued for 15 days.

Treatment Schedule

- 1 session per day for 15 days

Yogaraja Guggulu:

- **Dose:** 3 Tab (Each tablet 300mg)
- **Time:** Thrice in a day after meal
- **Route of Administration:** Oral
- **Duration:** 15 days

Balamula Kwatha

- **Dose:** 30 Ml
- **Time:** Twice in a day on empty stomach
- **Route of Administration:** Oral
- **Duration:** 15 days

RESULTS

After 15 Sessions of Agnikarma and Oral medicines (Day 15)

- VAS: 8 → 3
- WOMAC: 62 → 34
- Improved mobility and gait
- Patient able to climb stairs with minimal discomfort

Table- 5: Improvement

Criteria for assessment	Before treatment	After treatment
VAS	8	3
WOMAC	62	34

1-Month Follow-Up

- Pain stable (VAS 2–3)

No recurrence of swelling or stiffness.

DISCUSSION

In modified Agnikarma method, instead of a hot Shalaka, an Arkapatra and a flaming spirit-soaked cotton swab are used on the most tender points of knee joint. This method avoids skin burns, wounds, and scarring, allowing daily repetition and better therapeutic benefit.

Although ancient texts do not explain its mechanism, Agnikarma is traditionally considered effective due to its "Prabhava."

Agnikarma exerts ushna, tikshna, and sukshma actions which alleviate Vata-Kapha aggravated conditions. Since Vata-related pain is linked to cold (Shita) qualities, applying heat (Ushna) through Agnikarma logically helps relieve pain in Janu Sandhigatavata. Heat application enhances local circulation, reduces stiffness, improves cartilage nutrition, and modulates pain receptors. The modifications introduced reduced risk of burn injury, Improved uniformity of application and better reproducibility between practitioners. This study discusses Agnikarma as used for treating knee OA. Classical texts describe Agnikarma as a minimally invasive para-surgical procedure indicated for Vata and Kapha disorders, especially when other treatments like medicines, surgery, or Ksharakarma fail. It offers quick relief and shows minimal recurrence when done properly.

Yogaraja guggulu is vedana sthapana(subside pain), Shoolahara(analgesic), shothahara(anti-inflammatory), vranaropana(wound healer), balya(immune modulator), dipana(increase digestive fire), anuloamana, tridoshahara (pacifies all three dosha). Analytical study done on yogaraja guggulu indicate that it inhibits both Cyclooxygenase (COX) - 1 & 2 enzymes and 5-Lipoxygenase (LOX) enzymes indicating its potential as an anti-inflammatory agent.

Balamoola has madhura rasa, guru, snigdha and picchila guna and madhura vipaka. It mitigates laghu, ruksha, chala and sheeta properties of vata. Additionally, The drugs has anti- inflammatory and analgesic properties,which alleviate the pain.

CONCLUSION

The modified method of Agnikarma along with Yogaraja Guggulu and Balamoola Kwatha provided significant pain relief, improved functional mobility, and enhanced patient comfort in knee osteoarthritis. This refined technique offers a safer and more standardized procedure suitable for wider clinical application.

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Patient Consent

Informed written consent was obtained from the patient for publication of this case report.

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