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## "Clinical Evaluation of Kulattha Kwath Yukta Kanji Nadi Sweda in the Management of Katishool (Acute Low Back Pain): A Single-Arm Study"

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### ABSTRACT:

*Katishool (low back pain) is a prevalent global health issue and a leading cause of disability, affecting individuals of all ages and impacting work performance and overall well-being. It is classified under Vatajananatmajavikara in Ayurveda and is recognized as both a symptom and a disease. Katishool involves pain in the Kati Pradesha due to Shuddha Vata, Sama Vata, and Kapha, leading to pain during movement, stiffness, and reduced functionality.*

*Lumbar spondylosis is a degenerative condition affecting the intervertebral discs and lumbar spine. According to research by Nuki G. et al. (1999), disc degeneration begins in the third decade of life, indicating that structural changes in the spine may start as early as the twenties. Over time, intervertebral discs lose hydration and elasticity, resulting in reduced disc height, small tears, or cracks in the outer layer. These changes can cause disc bulging or herniation, leading to nerve compression and associated pain. Additionally, osteophyte (bone spur) formation further contributes to spinal stiffness and discomfort, collectively leading to lumbar spondylosis.*

*Conventional treatments involve the use of steroids and NSAIDs, which may have adverse effects on the liver and kidneys. In contrast, Swedana, an Ayurvedic therapy that induces sweating, utilizes heat to alleviate muscle stiffness and spasms. Its Tikshna property helps eliminate impurities, making it an effective alternative for pain relief without harmful systemic effects.*

**Keywords:** *Katishool, Lumbar spondylosis, low back pain, Swedana, Kulattha, Kanji*

### Introduction:

Ayurveda, a holistic science, emphasizes physical, mental, and spiritual well-being. With changing lifestyles, modern society faces increasing health issues, particularly low back pain (LBP), a major public health concern worldwide. LBP, often linked to lumbar spondylosis, affects a significant percentage of adults, leading to disability, reduced work efficiency, and rising healthcare costs.<sup>[1][2][3][4]</sup>

In Ayurveda, *Katishool* (LBP) is associated with Vata dosha imbalance and is described as

both a disease and a symptom of various Vata Vyadhi. The condition is characterized by pain and stiffness due to Vata Prokop or Marga Avarodha in the *Kati Pradesha*.<sup>[5]</sup>

Conventional treatments, including NSAIDs and steroids, provide symptomatic relief but come with adverse effects. Ayurveda suggests Swedana (sudation therapy) as an effective alternative. *Kulattha Kwath Yukta Kanji Nadi Sweda*, a medicated steam therapy, utilizes Ushna (hot), Tikshna (sharp), and Kapha-Vata alleviating properties to relieve pain and improve mobility. This study, involving 32 patients aged 16-40 years, evaluates the efficacy of *Nadi Sweda* for seven days, assessing pain reduction and lumbar flexibility. Given the lack of a universally accepted treatment for *Katishool*, this research highlights Ayurveda's potential as a safe and effective approach to managing acute low back pain.

#### **Aim:**

To evaluate the effectiveness of *Kulattha Kwath Yukta Kanji Nadi Sweda* in managing *Katishool* with reference to acute low back pain.

#### **Objectives:**

##### **Primary Objective:**

- To assess the therapeutic impact of *Kulattha Kwath Yukta Kanji Nadi Sweda* in *Katishool*.

##### **Secondary Objectives:**

- To evaluate its effect on lumbar flexion and extension.
- To analyze overall treatment efficacy in *Katishool*.
- To study its conceptual basis in Ayurvedic literature.
- To explore Ayurvedic perspectives on *Katishool* and acute low back pain.

#### **Methodology:**

A randomized clinical trial was conducted at an Ayurvedic medical college and hospital after receiving ethical committee approval (CTRI no: CTRI/2022/08/044904).

#### **Study Design & Setting:**

- **Type:** Open randomized clinical study
- **Location:** Ayurvedic Medical College & Hospital
- **Sampling Technique:** Consecutive incidental sampling
- **Study Population:** Patients with classical signs of *Katishool*

#### **Sample Size Calculation:**

The sample size was determined using standard statistical formulas, ensuring an 80% study power with a 5% Type I error rate and a 20% Type II error rate. Based on these parameters, 32 patients were recruited for the study.

#### **Inclusion Criteria:**

- Male and female patients aged 16-40 years

- Individuals exhibiting symptoms of Katishool
- Symptoms of low back pain persisting for no more than six weeks

**Exclusion Criteria:**

- Children and pregnant women
- Patients with uncontrolled diabetes or hypertension
- History of cancer, unexplained weight loss
- Cauda Equina Syndrome (loss of bladder/bowel control, motor weakness)
- Spinal fractures or chronic corticosteroid use

**Treatment Protocol:**

Patients underwent Kulattha Kwath Yukta Kanji Nadi Sweda therapy for seven days. The procedure involved Swedana infused with Kulattha Kwath and Kanji to relieve pain and stiffness.

**Drug Review:**

**Kulattha<sup>[6-16]</sup>**

**Botanical Classification:**

- Botanical Name: *Dolichos biflorus*
- Family: Leguminosae
- Synonyms: Khalva, Vardhipatraka
- Parts Used: Seed

**Properties:**

- Rasa: Kashaya
- Guna: Laghu, Sara
- Virya: Ushna
- Vipaka: Katu
- Karma: Vidahi, Krimihara, Kampavatahara
- Rogaghnata: Hikka, Ashmari, Pinasa, Medohar, Jwarahar, Krimihar, Shoolnashan, Grahani, Kaas, Shwas, Arsha, Shoth, Udara

**Morphology & Distribution:**

- Leaves are 2.5–5 cm long, oval-shaped; flowers are 1.5–2.5 cm, yellow; pods are 2.5–5 cm, slightly curved with 5-6 seeds.
- Found across the Indian subcontinent, thriving up to 1000m altitude.

**Chemical Constituents:**

- Steroids, triterpenoids, tannins, flavonoids, proteins, glycosides, saponins, alkaloids, and sugars contribute to its anti-inflammatory & antioxidant properties.

**Pharmacological Activities:**

- Antihepatotoxic, hypolipidemic, diuretic, hypotensive, anti-spasmodic, myocardial stimulant,

antistress, hypoglycemic, virus inhibitory.

### Important Ayurvedic References:

- *Bhavaprakasha Nighantu, Dhanvantari Nighantu, Kaiyadeva Nighantu, Madanapala Nighantu, Priya Nighantu, and Raja Nighantu* describe its effectiveness in Shwas, Kaas, Arsha, Vibandha, and Jwara.

### Formulations & Dose:

- Used in: *Saptakshara Kwath Churna, Dhanvantari Taila*
- Dose: 12g in powder form for decoction

### Kanji<sup>[17][18][19]</sup>

*Kanji*, also known as *Dhanyamla*, is a unique Ayurvedic fermentative preparation classified under *Sandhana Kalpana*. It falls under *Sukta Kalpana* (acidic preparations), unlike *Asava* and *Arishta*, which belong to *Madya Kalpana* (alcoholic preparations).

### Preparation & Properties:

- Prepared From: *Shashtishali (Oryza sativum)*
- Rasa: Amla
- Guna: Laghu, Snigdha, Teekshna, Sheeta Sparsha
- Vipaka: Amla
- Veerya: Ushna

### Pharmacological Actions & Benefits:

- Enhances Agni (*Deepana, Pachana*), improves digestion, and balances Vata and Kapha Dosh.
- Effective in Vataja & Kaphaja disorders, including *Vata Vaha Srotas* and *Asthi Vaha Srotas* diseases.
- Works as *\*Vatanulomana, Shula Prashamana, Nadi Uttejaka, Vedana Sthapana, and Sheeta Prashamana*.

### Phytochemical & Therapeutic Actions:

- Rich in flavonoids & tannins, providing antioxidant, anti-inflammatory, and wound-healing properties.
- Hesperidin (a glucoside) helps in capillary protection, anti-inflammatory action, and improved circulation.
- Useful in metabolic disorders like *Atisthaulya* due to its hypoglycemic & antihyperlipidemic effects.

### Preparation of Kanji<sup>[20-22]</sup>

The Kanji was prepared following Acharya Yadavji Trikamji's method. *Shashtishali (Oryza sativum)* was procured from the local market and authenticated by ALARSIN Pharmacy.

**Procedure:**

1 part of cooked *Shashtishali* rice (60 kg) was placed in a fumigated 250-liter vessel.  
3 parts of lukewarm water (180 liters) were added, and the vessel was sealed for fermentation.  
Fermentation was assessed using Sandhan Siddhi Pariksha (*Shabda Pariksha, Burning Candle Test, Ganda Pariksha*).  
After 15 days, upon achieving *Sandhan Siddhi Lakshanas*, the liquid was filtered and stored.

**Preparation of Kulattha Kwath<sup>[23]</sup>**

The Kulattha Kwath was prepared daily as per Sharangdhar Samhita. The *Kulattha* was sourced from the local market and authenticated by ALARSIN Pharmacy.

**Procedure:**

375g of Kulattha was taken in a stainless steel vessel.  
6 liters of water was added and boiled until reduced to 1/8th.  
The Kwath was then filtered for use.

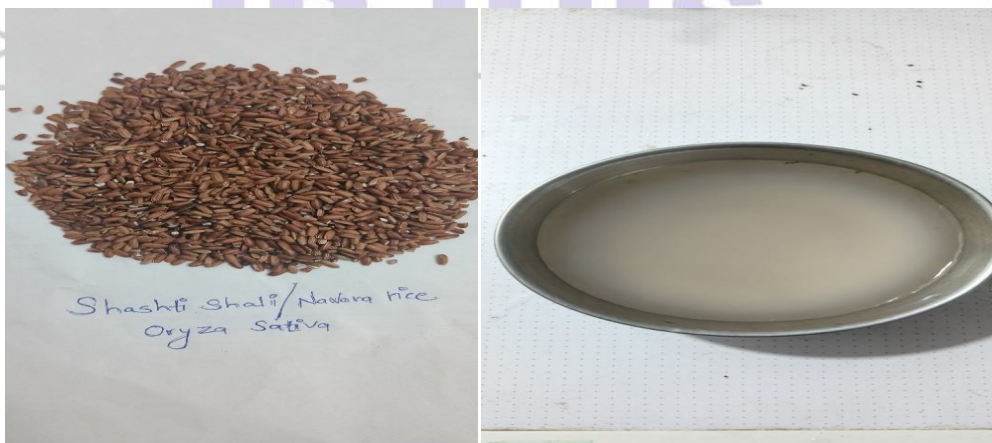
**Treatment Procedure:**

The therapy consisted of three phases:

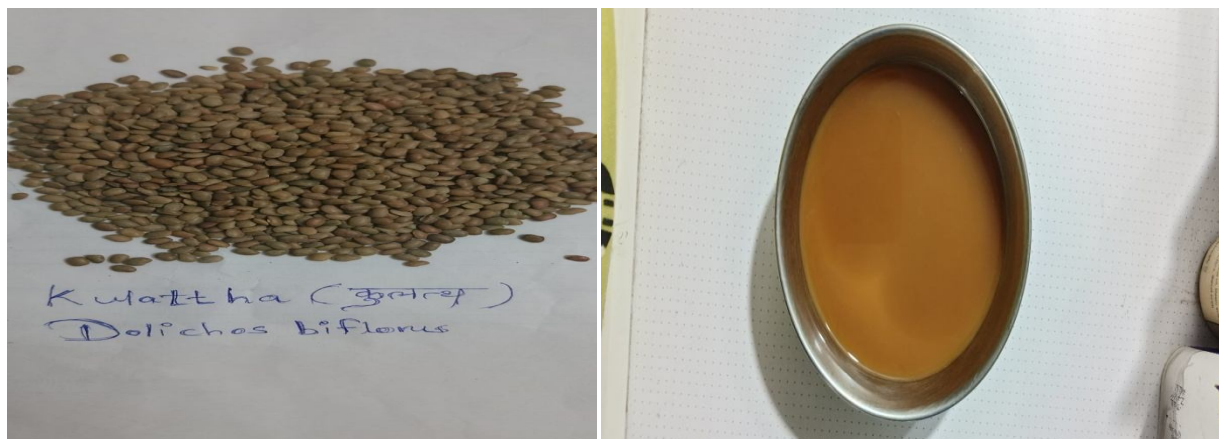
1. Poorva Karma (Pre-treatment):
  - Til taila Snehana for 10 minutes on the lower back and limbs.
  - Freshly prepared *Kulattha Kwath Yukta Kanji* set up in a Nadi Swedan Yantra.
2. Pradhan Karma (Main Therapy):
  - Nadi Swedana to the lower back using a steam generator with a rubber tube.
  - Steam directed over the affected area for 30 minutes daily for 7 days.
3. Paschat Karma (Post-treatment):
  - The treated area was covered to retain warmth and avoid exposure to direct airflow.

**Assessment Criteria:**

- Primary Outcome: Pain reduction (Measured using Visual Analog Scale - VAS)
- Secondary Outcomes: Improvement in lumbar flexion & extension angles



**Kanji**



**Kulattha kwath**

**Assesment criteria:**

**Subjective assessment Criteria**

1. Katishool: - YES / NO

(Intensity on walking)

2. Akunchan prasaranayo vedana :- YES / NO

(pain on extension and flexion)

**Objective assessment Criteria<sup>[24]</sup>**

| ASSESMENT CRITERIA                           | 0<br>No pain | +<br>MILD | ++<br>MODERATE | +++<br>SEVERE | ++++<br>UNCONTROLLABLE | NORMAL RANGE        |
|--|--------------|-----------|----------------|---------------|------------------------|---------------------|
| PAIN   |              |           |                |               |                        | NO PAIN             |
| DIFFICULTY TO SIT IN SQUATTING POSITION      |              |           |                |               |                        | NO PAIN/ DIFFICULTY |
| DIFFICULTY TO GET UP FROM SQUATTING POSITION |              |           |                |               |                        | NO PAIN/ DIFFICULTY |

**VISUAL ANALOGUE SCALE**

|                |             |                 |               |                                  |
|----------------|-------------|-----------------|---------------|----------------------------------|
| 0              | 1 2 3       | 4 5 6           | 7 8 9         | 10                               |
| <b>NO PAIN</b> | <b>MILD</b> | <b>MODERATE</b> | <b>SEVERE</b> | <b>WORST PAIN<br/>IMAGINABLE</b> |

**ROM FOR LUMBAR SPINE** <sup>[25]</sup>

ANGLE OF LUMBAR FLEXION – Normal range minimum up to 75-90 degrees

ANGLE OF LUMBAR EXTENTION – Normal range upto 30 degree.

(Measurement of both Angles was taken from iliac spine by Goniometer)

**OBSERVATIONS:**

**Age & Gender Distribution:**

- Majority (46.9%) of patients were in the 36-40 years age group. Improper diet and lifestyle in this phase contribute to *Vata* and *Kapha* imbalances, leading to *Katishool*.
- 62.5% were female and 37.5% male. Structural differences, hormonal changes, pregnancy, and menopause contribute to higher susceptibility in females.

**Occupation & Lifestyle Factors:**

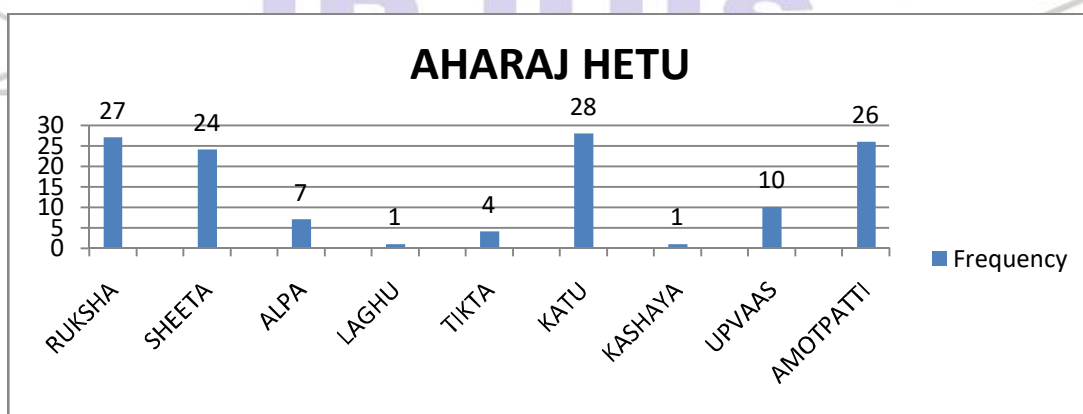
- 56.3% had desk jobs (IT professionals, engineers), leading to *Vata-Kapha prakopa* due to a sedentary lifestyle.
- 31.3% were housewives, affected by postural strain, workload, and stress.
- 90.6% were married, and 96.9% were from Anup Desha, but no significant correlation was observed.

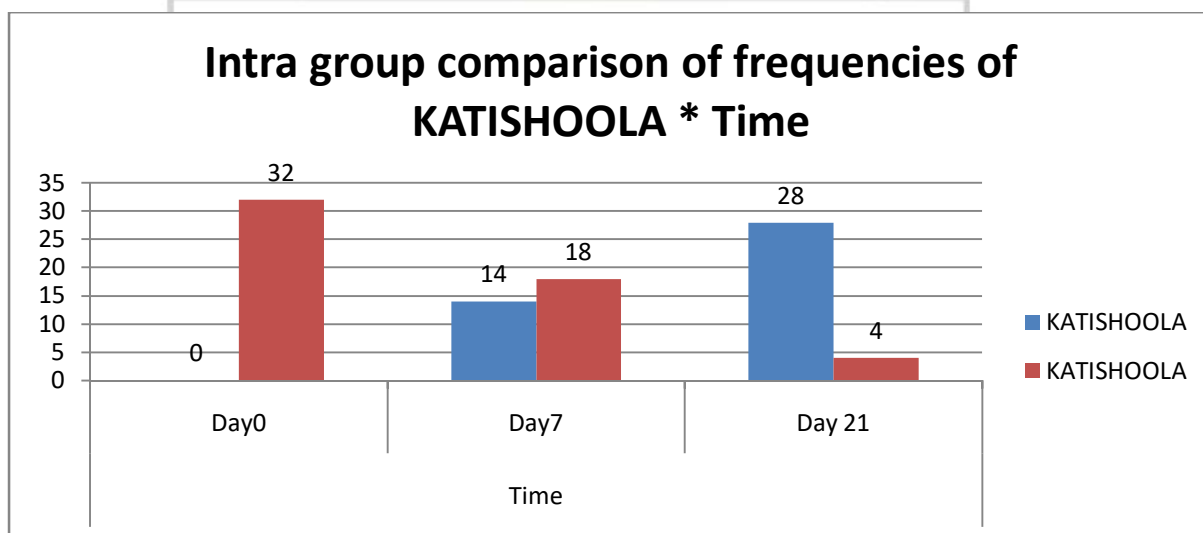
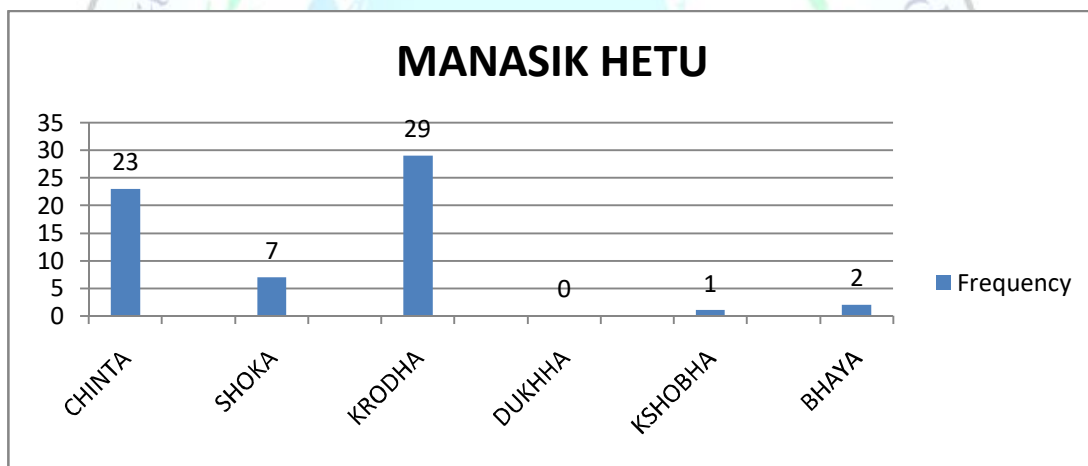
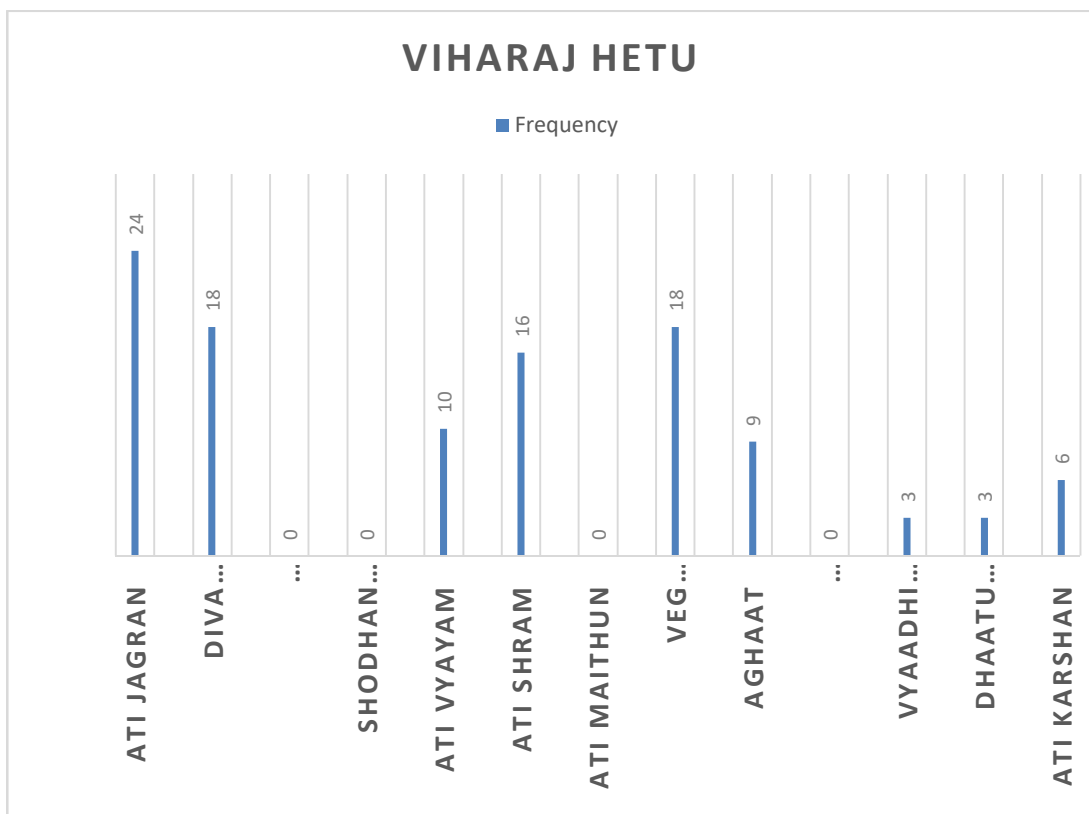
**Diet & Prakruti:**

- 53.1% followed a mixed diet, while 46.9% were vegetarian. Higher consumption of non-veg food is linked to inflammatory markers affecting pain thresholds.
- 59.4% were *Vata-Kapha Prakruti*, indicating susceptibility to *Vata Vyadhi*.

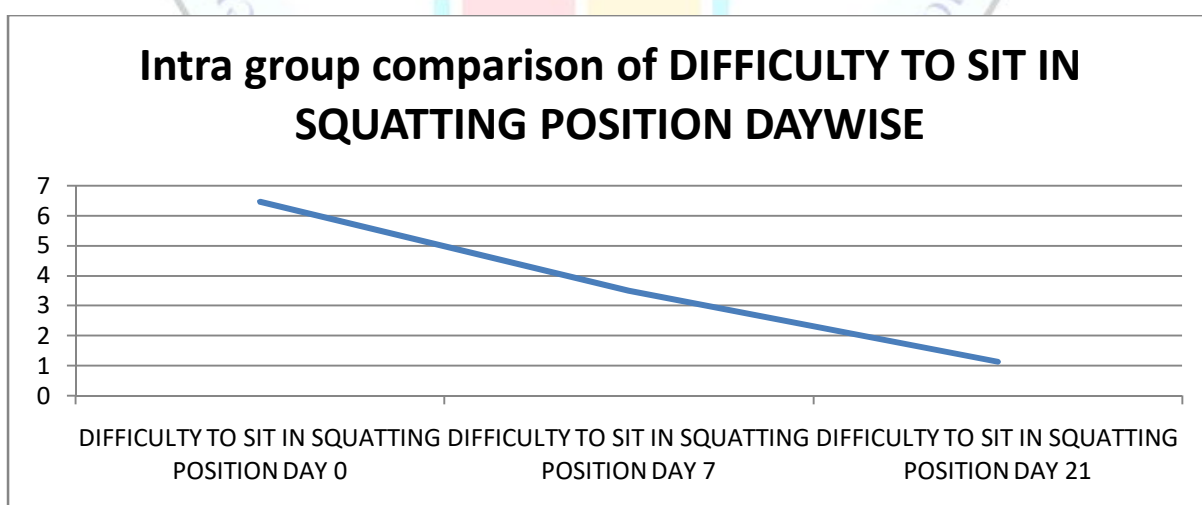
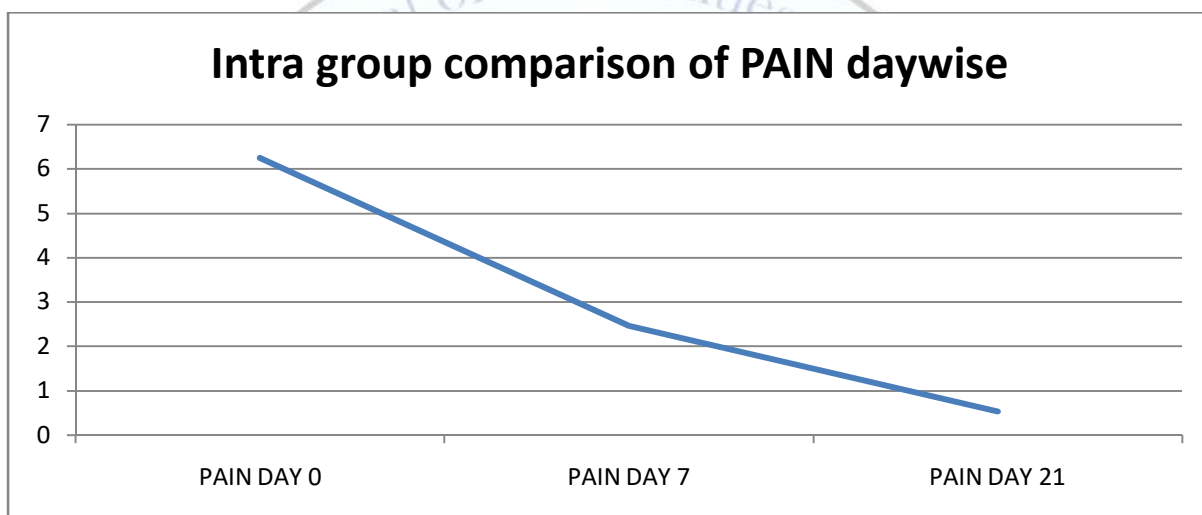
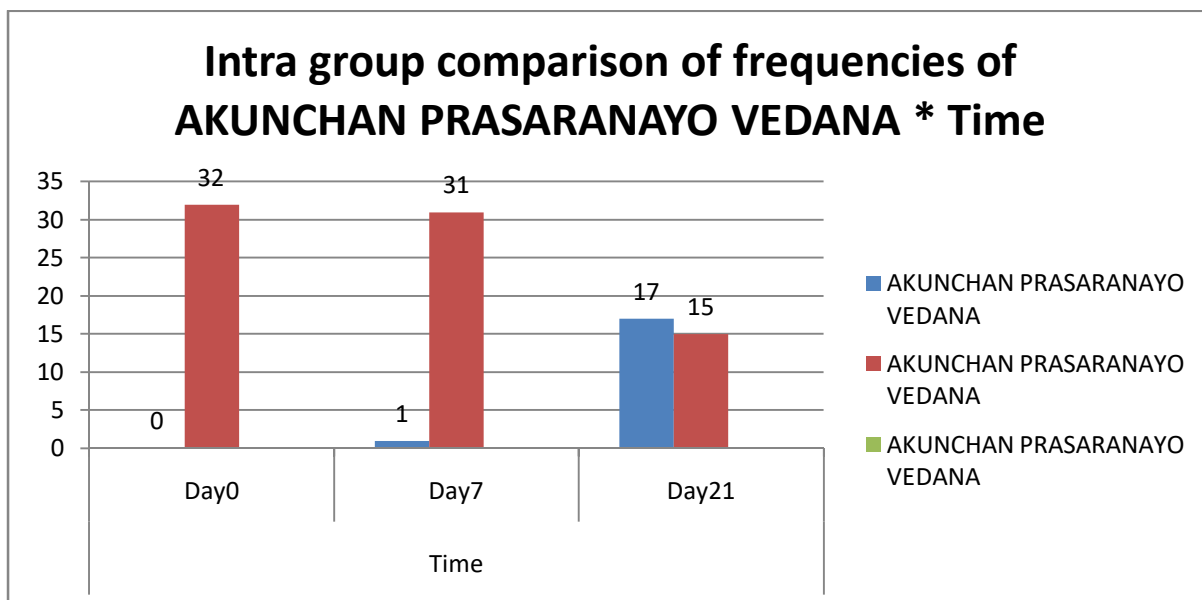
**Agni, Mala & Jivha:**

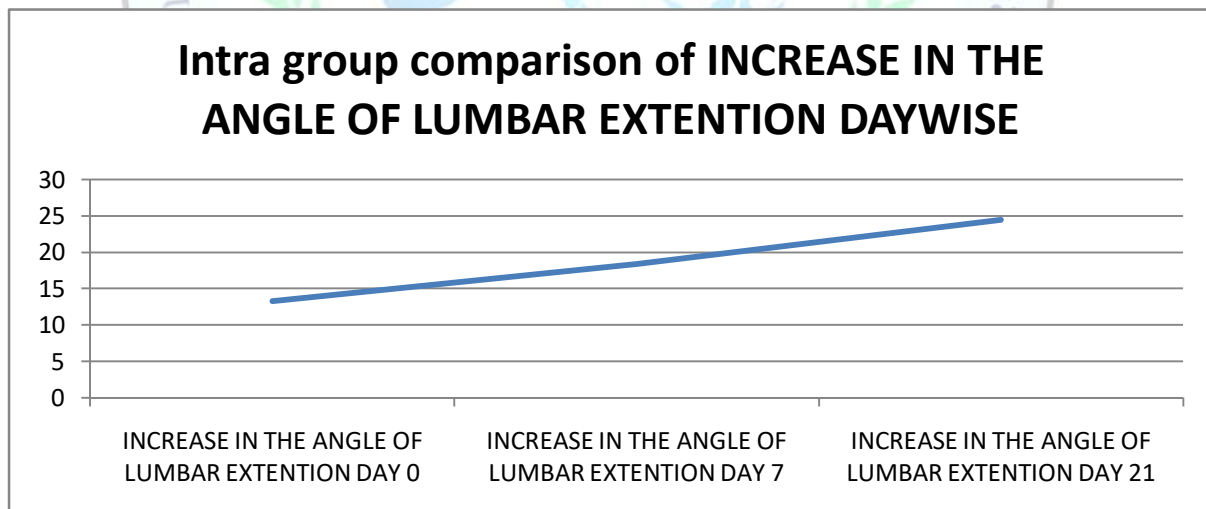
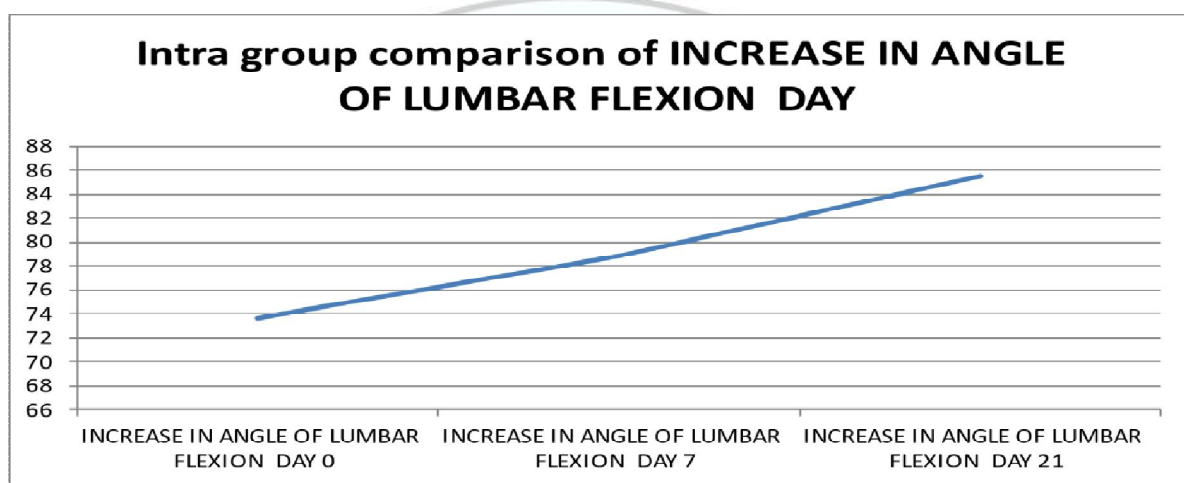
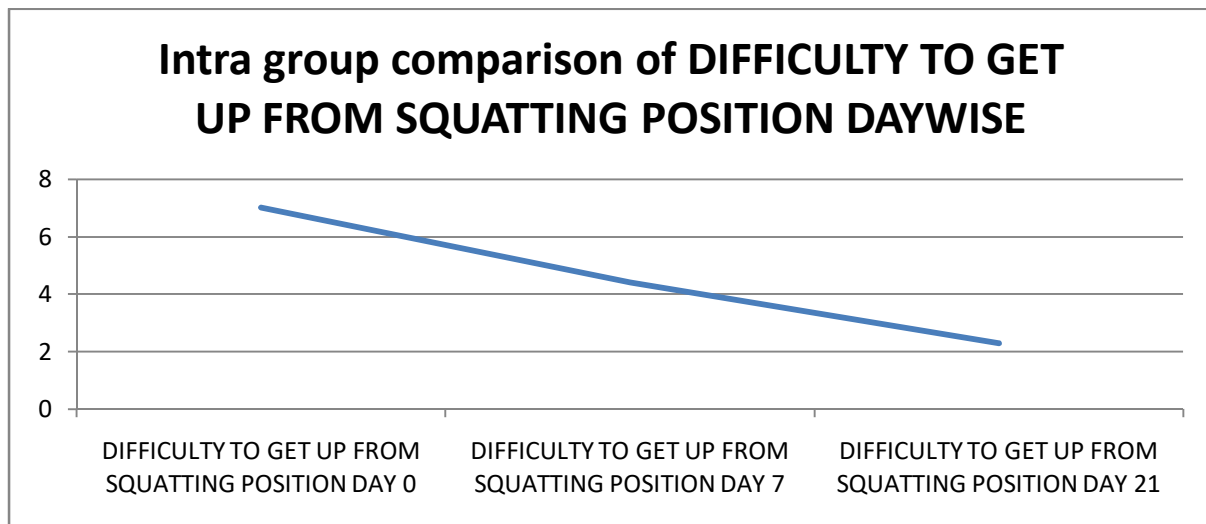
- 53.1% had *Manda Agni*, contributing to *Aam* formation, a key factor in *Vata Vyadhi*.
- 78.1% had unsatisfactory bowel movements, indicating *Vata vitiation* at *Pakvashaya* and *Kati Pradesh*.
- 93.8% had *Saam Jivha*, confirming *Aam's* role in *Katishool* pathology.











### Statistical Analysis & Clinical Outcomes

#### Subjective Parameters:

1. Katishool:
  - Highly significant reduction ( $p < 0.01$ ) from 32 patients (Day 0) to 4 patients (Day 21).
2. Akunchan Prasarnayo Vedana:

- Decreased from 32 patients (Day 0) to 15 patients (Day 21), showing gradual improvement.

### Objective Parameters (VAS Scale & Mobility Assessment)

#### 1. Pain Reduction (VAS Score)

- Day 0:  $6.25 \pm 0.71$  → Day 7:  $2.47 \pm 1.45$  → Day 21:  $0.53 \pm 0.87$  ( $p < 0.01$ ).

#### 2. Squatting Difficulty

- Sitting: 6.47 (Day 0) → 3.50 (Day 7) → 1.13 (Day 21) ( $p < 0.01$ ).
- Getting Up: 7.03 (Day 0) → 4.41 (Day 7) → 2.28 (Day 21) ( $p < 0.01$ ).

#### 3. Lumbar Mobility (Flexion & Extension Angles)

- Flexion:  $73.59^\circ$  (Day 0) →  $85.47^\circ$  (Day 21) ( $p < 0.01$ ).
- Extension:  $13.28^\circ$  (Day 0) →  $24.53^\circ$  (Day 21) ( $p < 0.01$ ).

### Conclusion:

The study established that Kulattha Kwath Yukta Kanji Nadi Sweda is an effective Ayurvedic intervention for managing *Katishool* (low back pain), significantly reducing pain, stiffness, and inflammation while enhancing lumbar mobility. In *Katishool*, the accumulation of *Saam dosha* along with *Kapha* in *Rikta Srotasa* leads to *Vata vitiation*, resulting in pain, muscular stiffness, inflammation, and restricted movements. The therapy, rooted in Swedana Karma, works by addressing the imbalance of Vata and Kapha Dosha, which are primary contributors to musculoskeletal disorders.

The treatment effectively combines traditional Ayurvedic principles with modern scientific understanding, utilizing heat therapy and herbal formulations to enhance circulation, relieve muscular tension, and promote relaxation. *Nadi Sweda* increases vasodilation, metabolic activity, and pain modulation, contributing to the overall relief of symptoms.

The herbal ingredients used, particularly Kulattha and Kanji, contain flavonoids and tannins, which have anti-inflammatory, muscle relaxant, and pain-relieving properties. These phytochemicals inhibit inflammatory mediators such as prostaglandins and leukotrienes, reducing inflammatory enzyme activity and easing musculoskeletal discomfort. This supports pain relief, enhances joint mobility, and reduces muscle spasms, allowing for smoother movement and functional recovery.

### Probable Mode of Action of Kulattha Kwath Yukta Kanji Nadi Sweda<sup>[26][27]</sup>

*Nadi Sweda* facilitates transdermal absorption of herbal properties through Loma Koopa, where it undergoes Pachana by Bhrajak Pitta, enhancing therapeutic effects.

- Kulattha Kwath: With its Laghu, Ruksha, Tikshna, Kashaya Rasa, and Ushna Veerya, it pacifies *Kapha*, aids in *Amapachana*, and promotes *Vata Shamana*. Its alkaloids, flavonoids, and tannins contribute to anti-inflammatory, antioxidant, and muscle relaxant properties, reducing stiffness and promoting joint mobility.

- Kanji: With Amla Rasa, Ushna Veerya, and Laghu, Snigdha Guna, it stimulates Agni, enhances *Bhrajak Pitta*, and effectively manages *Vata-Kapha disorders*. Its flavonoids and tannins support capillary function, reduce inflammation, and aid tissue healing.

### Comparison with Modern Drug Delivery:

*Nadi Sweda* functions similarly to transdermal drug delivery, allowing direct absorption into circulation, bypassing first-pass metabolism, ensuring higher bioavailability and faster relief. This makes it a practical and effective Ayurvedic therapy for musculoskeletal conditions like *Katishool*.

### Clinical Observations and Improvements:

The study showed statistically significant improvements in both subjective and objective parameters:

- **Subjective Assessments:** There was a substantial reduction in *Katishool* and *Akunchan Prasaranayo Vedana*, indicating marked symptomatic relief in patients.
- **Objective Parameters:**
  - Pain levels significantly decreased, as seen in VAS scores over the study period.
  - Mobility improved, with a notable reduction in squatting difficulties and increased lumbar flexion and extension angles.
  - Muscle stiffness and inflammation reduced, improving overall movement and functional activities.

### Impact of Demographic Factors:

The study highlighted the influence of age, gender, profession, diet, and *Prakruti* in *Katishool* prevalence.

- Middle-aged individuals (36–40 years) were most affected, likely due to work stress, improper posture, and a sedentary lifestyle.
- Females (62.5%) showed higher susceptibility due to hormonal changes, pregnancy, menopause, and anatomical differences.
- Profession also played a crucial role, with desk job workers (56.3%) and housewives (31.3%) being the most affected, emphasizing the impact of prolonged sitting, physical strain, and lack of physical activity.
- Dietary habits influenced inflammatory markers, affecting pain thresholds, with a higher prevalence in individuals consuming non-vegetarian diets.

### Holistic Approach for Long-term Management:

The discussion underscores the importance of addressing lifestyle factors, dietary habits, and psychological stress in *Katishool* management. Ayurveda emphasizes that chronic pain conditions require a multi-dimensional approach, including:

- Regulated diet (*Pathya-Apathya Ahara*) to prevent *Aam* formation and *Vata* aggravation.

- Exercise and postural corrections to maintain spinal flexibility.
- Stress management techniques, as *Manasika Hetus* like Krodha, Chinta, and Shoka contribute to *Vata aggravation*.

#### REFERENCES:

1. Pye SR, Reid DM, Smith R, Adams JE, Nelson K, Silman AJ, et al. Radiographic features of lumbar disc degeneration and self-reported back Rheumatol. 2004;31:753-758. [PubMed] pain. J
2. Medscape. Lumbar Spondylosis. Available from: <http://www.emedicine.medscape.com/article/249036-overview#showall>. [Last updated on 2015 Oct 23; Last accessed on 2016 Apr 12].
3. Yamada Y, Okuizumi H, Miyauchi A, Takagi Y, Ikeda K, Harada A, et al. Association of transforming growth factor beta1 genotype with spinal osteophytosis in Japanese women. Arthritis Rheum 2000;43:452-60.
4. Zukowski LA, Falsetti AB, Tillman MD. The influence of sex, age and BMI on the
5. Pt Harisadashiva shastri paradakara, editor. Sarvang sundar commentary by Arundatta and Ayurveda rasayan commentary by Hemadri of Astanga Hridaya of Vagbhata, Nidana Sthan Vatashonitanidana Adhayay 16 verse 32. Varanasi: Choukhambha Surbharati Prakashan Reprinted; 2017. p.538
6. The Ayurvedic Pharmacopoeia Of India, part 1, vol 1,pg 131-132
7. Vaidya Vishnu Mahadev Gogate, Dravyagunvigyan, Edition 2014, Vaidyamitra Prakashan Pune, kulathha Page No 352.
8. T. Mahesh Babu, Dr. A. Vijaylakshmi and Dr. V. Narsimha Physiological and phytochemical analysis of Dolichos biflorus linn seeds.
9. Limi Elizabeth Mathew, G. Sindhu, A. Helen Dolichos biflorus exhibits anti-inflammatory and antioxidant activity properties in an acute inflammatory model. Journal of food and Drug Analysis (2014) 455-462
10. Bhavprakash nighnatu, Prof. Krishnachanda Chunekar, Chaukhambha Bharati Academy, Varanasi, Revised edition, 2010, page nos-13, 98, 277, 496, 638
11. Dhanavantari nighnatu, Dr Jharakhande Ojha, Dr Umapati Misra, Chaukhambha Sanskrit Pratishthan, Revised edition, 2004. Page nos- 32, 39, 115, 172, 265
12. Rajnighnatu, Dr. Indradev Tripathi, Chaukhambha Sanskrit Sansthan, Varanasi, 3 edition, 2003, page nos 67, 118, 119, 138, 139, 165, 327
13. Priyanighnatu, Acharya Priyavat Sharma, Chaukhambha Surbharati prakashana, Varanasi, 1 edition, 1983, Page nos- 13, 58, 69, 99, 103

14. Kalyadev nighantu, Prof. Priyevat Sharma, Dr Guruprasad Sharma, Chaukhambha orientalia, Varanasi, Reprint-2009, Page nos- 13, 210, 213, 315, 633
15. Illustrated Madanpala nighantu, Dr. J.L.N. Sastry, Chaukhambha orientalia, Varanasi, 1 edition, 2010, Page nos 50,51,52, 168, 169, 170, 301 to 306, 462, 263, 792, 793
16. Databases on Indian medicinal plants, vol. 1 page nos- 73 to 79, Vol. 2- page nos- 500 to 531, vol, 4 page nos- 269 to 288, vol.5 page nos- 123 to 139 & 315 to 391
17. Suhsruta samhita by kaviraja Ambikaduttashastri AMS, Vol 1, Chaukhambha Sanskrit sansthan Varanasi, Sutra sthana chp 45 Dravadravyavidhi
18. Shribhav Mishra, Bhavpraksh nighantu, first part sandhan kalpa verse 11
19. RanasingheR.L.D.S, Ediriweera E.R.H.S.S,A Pharmacological aappraisal of Dhanyamla
20. Vaidya Santosh Kumar Sharma 'Khandal',Rasa Bhaishajya Kalpana Vigyaana Edition 2017,Publication Scheme Jaipur India, Chapter 13,Page No 477.
21. sr Govindasena, Vaidyak Paribhasha Pradip, Chaukhambha Sanskrit Bhavan,Tritiya Khanda, Page No 79,Shloke no 187
22. Dr. Brahmananda Tripathi, sharangdhar Samhita with Dipika hindi commentary, chaukhamba surbharati prakashan, Varanasi. edition 2020.Madhyam khanda chapter 2 verse 169 pg 106.
23. DR.Brahmananda Tripathi, Shrangdhara Samhita, Edition 2020, Chaukhamba Surbharti Prakashan Varanasi, Madhyam Khanda,Page No 90, Chapter 2, Shloke 1-2.
24. B M Rashmi, Kumari Nisha, Ajantha. Upashayatmaka Effect of Shunthi Churna Udvartana in Katishula. International Journal of Ayurveda and Pharma Research. 2017;5(8):23-27
25. Human Anatomy Fundamentals: Flexibility and Joint Limitations by Joumana Medlej 6 Mar 2014
26. Limi Elizabeth Mathew, G.sindhu, A. Helen Dolichos biflorus exhibits anti-inflammatory and antioxidant activity properties in an acute inflammatory model. Journal of food and Drug Analysis(2014) 455-462
27. RanasingheR.L.D.S, Ediriweera E.R.H.S.S,A Pharmacological aappraisal of Dhanyamla.

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