



Original Research Article

Volume 12 Issue 6

Nov-Dec 2023

NIRGUNDI PATRA IN SANDHIGATA VATA: CASE STUDY

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Abstract

Joint pain is a frequently seen complaint during practice especially due to osteoarthritis. In the present case study, 30 years old male, yoga teacher by profession suffering from *Sandhigata vata* came for Ayurvedic management. *Sandhigata vata* is one of the *Vatavyadhi* which corresponds to the Osteoarthritis. Nirgundi Patra Kashaya was given to the patient which is Vaatahara, Shothahara and Shoolahara as a treatment orally. The parameters like *Vaatapurnadritisparsha Shotha*, *Prasaranaakunchanayovedana*, *Atopa*, *Sandhi shoola* are used for the assessment and grading was done, patient got relieved by the time of completion of the study which is evident by grading. It is proved from the present case study that Nirgundi Patra is effective in Sandhi gata vaata.

Key words: *Sandhigata vata*, *Nirgundi Patra*, Osteoarthritis.

INTRODUCTION

Joint pain is the most common complaint which can be seen in clinical practice, which is prevalent among elderly people, especially due to osteoarthritis. ^[1] Osteoarthritis is a musculoskeletal disorder which is most prevalent globally and leading cause of chronic pain

and disability in India. Osteoarthritis rank changed from 23rd to 20th place, which indicates rise in burden of OA in India.^[2]

Sandhi gata vaata is one among the *Vatavyadhi* mentioned in Ayurveda Samhithas. The *lakshana* of *Sandhigata vata* mentioned by *Charaka* are *vaatapurnadritisparsha Shotha* (Swelling like air filled leather bag), *Prasaranaakunchanayovedana* (Pain during flexion and extension of knee joint). ^[9] *Madhava* mentions other *lakshana* called *Sandhi shoola* (Joint pain), *Atopa* (Pain associated with Crepitus). *Sthana samshraya* of *Vaata* in *Greeva*, *Trika* and *Jaanu sandhi* leads to manifestation of the *lakshana*. ^[10] The treatment principle for the *Sandhigata vata* is alleviation of *vata* which leads to reduction in *Shoola* and *Shotha* of *sandhi* which are affected.

Nirgundi, *Vitex negundo* Linn. Belongs to Verbenaceae family, called as Five leaved Chaste tree, Indian privet. It is a woody, deciduous aromatic shrub growing to small tree, distributed throughout the greater parts of the India also occur in Pakistan, Afghanistan, Sri Lanka, Thailand, Malaysia, Eastern Africa and Madagascar. It is used a food crop also. ^[4] In *Bhavaprakasha Nighantu* it is mentioned that *Nirgundi* possess *Shoolahara* and *Shothahara karma*. ^[5]

Case reports

Case 1:

A male patient aged about 30 years came to Dravyaguna OPD of Sri Sri Ayurveda Hospital and research centre, Bengaluru. Complains of Pain and crackling sound over the bilateral Knee joints, which increases with the movement since 3 months associated with pain in neck and lumbar region. He was not under any medication for the above complaints.

Personal / Family history

He is a yoga teacher. There was no family history related to any systemic disorder.

Past history

Patient is not a known case of any systemic disease.

Examination

Local examination

Table no. 1: Knee joint examination

	Right knee joint	Left knee joint
Crepitus	Present	Present
Swelling	Absent	Absent
Pain during flexion and extension of joint	Present	Present

Table no. 2: Neck examination

Pain on the forward bending of neck	Positive
Pain on the backward bending of neck	Positive
Pain on the side wise bending of neck	Positive
Pain on the side rotation of the neck	Positive

Table no. 3: Spine examination

Tenderness in the mid thoracic region	Positive		
Pain in the lumbar region	Positive	SLR test	Negative bilateral
		Pain on forward bending	Negative
		Pain on backward bending	Negative
		Pain on sidewise bending	Negative

a. Systemic examination

Central nervous system – patient is conscious and oriented.

Respiratory system – Bilateral air entry clear

Gastrointestinal system – No abnormalities detected.

MATERIALS AND METHODS**Dose and Dosage form of the medicine**

Nirgundi Patra Kashaya was given as a medicine in this condition, preparation procedure is as follows

Table 4: Ingredients and quantity for Kashaya preparation

Nirgundi Patra	10 grams
Water	160 ml

Reduced to 1/4th i.e, 40 ml.

Nirgundi Patra Kashaya 40 ml each was given to the patient twice a day i.e, morning and evening before food.



Fig 1. Nirgundi Patra ventral and dorsal view

Assessment criteria ^[1]

The parameters assessed in this study are

1. *Vaatapurnadritisparsha Shotha* (Swelling)
2. *Prasaranaakunchanayovedana* (Pain during flexion and extension of knee joint)
3. *Atopa* (Crepitus)
4. *Sandhi shoola* (Joint pain)

Grading of parameter ^[1]

1. *Vaatapurnadritisparsha Shotha* (Swelling)

Table 5: Grading of *Vaatapurnadritisparsha Shotha* (swelling)

Grade 0	No swelling
Grade 1	Mild swelling
Grade 2	Moderate swelling
Grade 3	Severe swelling

2. *Prasaranaakunchanayovedana* (Pain during flexion and extension of knee joint)

Table 6: Grading of *Prasaranaakunchanayovedana* (Pain during flexion and extension of knee joint)

Grade 0	No Pain
Grade 1	Pain without winching of face
Grade 2	Pain with winching of face
Grade 3	Prevent complete flexion

3. *Atopa* (Crepitus)**Table 7: *Atopa* (Crepitus)**

Grade 0	No crepitus
Grade 1	Palpable crepitus
Grade 2	Audible crepitus
Grade 3	Always audible crepitus

4. *Sandhi shoola* (Joint pain)**Table 7: *Sandhi shoola* (Joint pain)**

Grade 0	No Pain
Grade 1	Mild pain
Grade 2	Moderate pain
Grade 3	Severe pain

OBSERVATION AND RESULTS**Knee joint examination****Table 8: Improvement in symptoms of knee joints.**

Parameters	Knee Joint	B T	D-7	D-14	D-21	D-28	D-35	D-42
<i>Vaatapurnadritisparsha Shotha</i>	Right	1	0	0	0	0	0	0
	Left	1	1	1	0	0	0	0
<i>Prasaranaakunchanayovedana</i>	Right	1	1	1	1	0	0	0
	Left	1	1	1	0	0	0	0
<i>Atopa</i>	Right	2	1	1	0	0	0	0
	Left	2	1	0	1	0	0	0
<i>Sandhi shoola</i>	Right	2	2	1	1	0	0	0
	Left	2	1	1	1	0	0	0

*BT – Before treatment, *D – Day.

Neck examination

Table 9: Improvement in symptoms in neck region.

<i>Prasaranaakunchanayovedana</i>	B T	D-7	D-14	D-21	D-28	D-35	D-42
Pain on the forward bending of neck	2	2	2	1	1	1	0
Pain on the backward bending of neck	2	2	2	2	1	0	0
Pain on the side wise bending of neck	2	2	2	1	1	0	0
Pain on the side rotation of the neck	2	2	2	2	1	0	0

*BT – Before treatment, *D – Day.

Spine examination

Table 10: Improvement in symptoms.

<i>Sandhi shoola</i>	B T	D-7	D-14	D-21	D-28	D-35	D-42
Pain in the mid thoracic region	1	1	1	0	0	0	0
Pain in the lumbar region	1	0	0	0	0	0	0

*BT – Before treatment, *D – Day.

As he is yoga teacher before the treatment it was difficult to perform any postures of yoga due pain and crepitus, After the treatment improvement seen in the first week, later on completion of treatment patient is able to do yoga postures without interference of pain and crepitus especially knee joint. Even after 6 months of treatment no symptom of *Sandhigata vaata* mentioned as complaint was relapsed in this case.

DISCUSSION

The causative factors like Excessive intake of *Ruksha Ahara*, *Vega dharana* [Suppression of natural urges], excessive walking or physical activity increases *vata* in the body by aggravating its *guna* such as *Ruksha*, *Laghu*, *Sheeta*, *chala*. For the alleviation of these *guna* of *vata*, *dravyas* having opposite *lakshana* like *Snigdha*, *Ushna* is advised as medicine. [1]

Vata Vyadhi develops due to accumulation of aggravated vata in the empty spaces of the body channels or body parts [*Kha vaigunya*]. In these spaces due to increase in the *vata guna* like *Ruksha, Sheeta* leads to *dhatu kshaya* [Joint degeneration].^[1]

In the present case patient was presented with the complaints of pain and crackling sound in the bilateral knee joint, which increases on the movement associated with pain in the neck and lumbar region, on examination it was found that pain in mid thoracic region also. *Nirgundi Patra Kashaya* was given to patient for one *mandala* (40 – 45 days).

Nirgundi is having *Ushna veerya, Shothahara* and *shoola hara karma*, possesses *Doshagnatha* as *Vata Kaphahara*. *Vitex negundo* possess all the essential nutrients such as calcium, Phosphorus, Iron, Vitamin C, Fibre, needed for the human body.^[7] It is proved as Analgesic and Anti-inflammatory.^[3]

Sandhi shoola (Joint pain) is due to increase of *Sheeta guna* of *vata*, also deficiency in calcium produces joint pain which is an important contributor for bone health. *Ushna guna, Shoola hara karma* of *Nirgundi* along with this calcium levels in mature leaves of *Nirgundi* contributes to tackle the pathology. 5267.13 mg of calcium is present in 100 grams of *Nirgundi* leaves here patient is taking 20 grams of drug everyday which meets the daily intake of calcium level i.e, 1200 mg and maintains bone health.^[7] Reduction of pain completely in the right knee joint, left knee joint, neck region, mid thoracic region and lumbar can be noticed from the gradings.

Crepitus from within a joint is crackling sound contributes the diagnosis of the joint disease, it occurs when roughened articular or extra articular surfaces are rubbed together by active motion or by manual compression,^[6] increase in *ruksha guna* of *vata* leads to roughened articular surfaces, *Nirgundi Patra* due to its *Vaatahara karma* reduces *ruksha guna* of *vata*. It was noticed that complete reduction of *Atopa* (Palpable crepitus) in both the knee joints.

CONCLUSION

From the present case study, it can be concluded that *Nirgundi Patra* is effective in *Sandhigata vata*, which is having *Vaatahara, Shothahara* and *Shoolahara karma*. This case study sets an example for effectiveness of easily available *ekamoolika* like *Nirgundi* in

vatavyadhi like *Sandhigata vata*, this gives further scope for the research on large number of populations and also scope for research on *Ekamoolika* in other diseases.

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