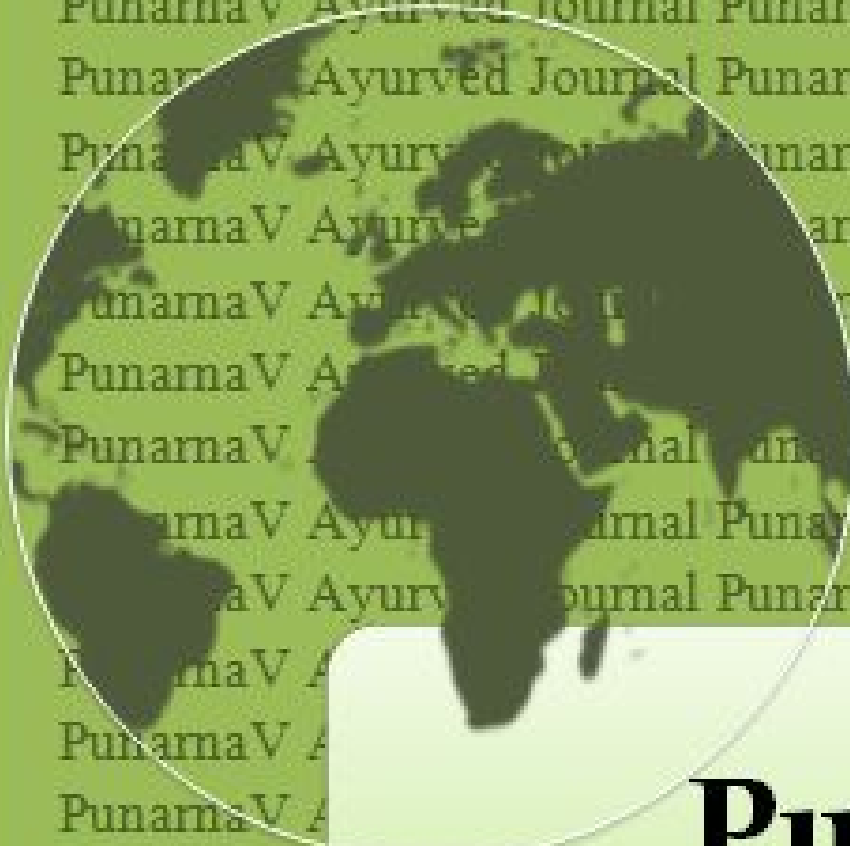


**MONTH: MAR: APR -2016**

**VOLUME: 4, ISSUE: 2**

**ISSN: 2348-1846**



# **Punarna V**

## **TITLE**

**CLINICAL STUDY TO ASSESS THE EFFECT OF YOGA BASTI IN SANDHIGATA VATA  
WITH SPECIAL REFERENCE TO OSTEOARTHRITIS**

**AKSHAYA GHANSHYAM PATIL<sup>1</sup>, V.J.TIWARI<sup>2</sup>, B.D.GHARJARE<sup>3</sup>, U.S.NIGAM<sup>4</sup>**

**AN INTERNATIONAL PEER REVIEWED AYURVED JOURNAL  
ON LINE BI-MONTHLY AYURVED JOURNAL**

**[www.punarnav.com](http://www.punarnav.com)**

**Email: [explore@punarnav.com](mailto:explore@punarnav.com), [punarnav.ayu@gmail.com](mailto:punarnav.ayu@gmail.com)**



## CLINICAL STUDY TO ASSESS THE EFFECT OF YOGA BASTI IN SANDHIGATA VATA WITH SPECIAL REFERENCE TO OSTEOARTHRITIS

AKSHAYA GHANSHYAM PATIL <sup>1</sup>, V.J.TIWARI <sup>2</sup>, B.D.GHARJARE <sup>3</sup>, U.S.NIGAM <sup>4</sup>

<sup>1</sup> M.D. SCHOLAR, PANCHAKARMA

<sup>2</sup> ASSOCIATE PROFESSOR, KAYACHIKITSA,

<sup>3</sup> PROFESSOR & HOD , DEPARTMENT OF PANCAKARMA,

<sup>4</sup> M.D, Ph.D, Y.M.T AYURVEDIC  
MEDICAL COLLEGE, KHARGHAR, NAVI MUMBAI INDIA.

### ABSTRACT:

*Sandhigata vata is a Vata disorder. Osteoarthritis is correlated with Sandhigata vata in Ayurveda. Basti Chikitsa is indicated to be best for management of Vata disorders. According to Acharya Charak, Basti chikitsa is said to be half of the whole treatment. In the present study Yoga Basti (8 days) of Devdarubaladi Tail is employed in management of Sandhigata vata for 50 patients presenting signs and symptoms of Osteoarthritis as mentioned in classics .Result: Patient got relief from pain and swelling at knee joint and gradually improved daily activities even though no changes were found in X-ray investigations. Conclusion: Yoga basti can be adopted to people in order to rejuvenate the body ,provide strength and longevity.*

**KEYWORDS:** *Devdarubaladi tail, Osteoarthritis, Sandhigata vata , Yoga basti,*

## INTRODUCTION

**CORRESPONDENT:  
DR AKSHAYA PATIL  
(MD SCHOLAR)  
PANCHAKARMA  
Y.M.T.AYURVEDIC  
COLLEGE,KHARGHAR,NAVI  
MUMBAI,  
MAHARASHTRA , INDIA**

According to Ayurveda, freedom from disease is not only health ,but to be healthy a person should be happy mentally ,physically, socially and also spiritually .Imbalance of *doshas* is termed as *Roga* and among *tridoshas* ,*Vata dosha* is responsible for almost all disease. In *vriddhavastha*, all *dhatu*s undergo *kshya* thus leading to *vatprakopa* and making individual prone to many diseases .Among them *Sandhigata Vata* stands top in the list. Till to date *Sandhigata Vata* is a challenging disease and is the numberone cause of disability. *Acharya Charak & Madhav Nidan* has explained *Sandhigata Vata* among the *Vata vyadhi*. Osteoarthritis of knee joint is more prevalent in Indian population which Relates to *Sandhigata vata*. Degeneration causes calcium deposit, arthritic decay, Narrowing disc, bone spurs advanced nerve irritation causing pain i.e. *Sandhigata Vata* compared to Osteoarthritis according to modern Science. Even though this pain is not fatal it cripples many facets of life.

According to WHO, Osteoarthritis is the 2<sup>nd</sup> commonest problem in The World population, i.e. 30% of population is suffering from this disease. Osteoarthritis is second rheumatologic problem and

frequent joint disease with Prevalence 22% to 39% in India. Expected as fourth leading cause of disability till the year 2020. Hence management of pain becomes first priority of physician.

*Tail* being *sarvashreshtha vataghna*, *Devdarubaladi tail* from *sahasrayog*, was administered in formed of *Yoga Basti* for the treatment of *Sandhigata vata*. *Sandhigata Vata* is a *Vata* disorders. *Basti Chikitsa* is indicated to be the best for management of *Vata* disorders. According to *Acharya Charak Basti* is said to be half of the whole treatment.

Current treatment for degenerative disease is purely control of symptoms, to control Prolongation of the degenerative process and to pacify the pain without complication.

## AIM & OBJECTIVES

1. To do clinical evaluation of *Devdarubaladi tail* in *Sandhigata Vata* through *Yoga basti*.
2. To establish effective formulation for the management of pain in *Sandhigata vata*.
3. To study in detail about *Sandhigata Vata* i.e. Osteoarthritis covering both Ayurvedic and modern treatise.
4. To study role of *Yoga basti* in *Sandhigata vata*.

## SOURCE OF DATA

50 Patients of *Sandhigata Vata* fulfilling the criteria for inclusion were selected from the O.P.D and I.P.D. irrespective of their gender, religion etc.

## INCLUSION CRITERIA

1. Patients selected irrespective of gender, occupation, education, and habitat.
2. Patients age group of 40 to 70 yrs of age.
3. Patients presenting classical sign and

**ASSESS THE EFFECT OF YOGA BASTI IN SANDHIGATA VATA W.S.R. TO  
OSTEOARTHRITIS**

symptoms of *Sandhigata vata*.

**EXCLUSION CRITERIA**

- 1 Patients with acute or chronic systemic, medical surgical ailment.
- 2 Patients with congenital or acquired abnormality related to joint.
3. Patients with rheumatoid arthritis, psoriatic arthritis, gout, sciatica, etc.
4. Patients associated with simple or compound fracture, associated with trauma.
5. K/C/O Immune compromised patients.
6. Patients on long term of steroids, chemotherapy.
7. Pregnant women, lactating women.
8. Contra-indicated for Basti Chikitsa.
9. Extreme disorders like Hypertension, Diabetes Mellitus etc are not included in the study.

**DIAGNOSTIC CRITERIA**

The diagnosis is mainly based on clinical presentation of patient according to signs and symptoms mentioned in classics such as sandhishoola, sandhigraha, atopa etc. and supplemented with signs and symptoms of osteoarthritis of knee joint

**.Self Assessment scoring system**

Sr. No	SIGN & SYMPTOMS	CRITERIA	SCORE
1.	Sandhishool (Pain)	None Mild Moderate Severe	0 1 2 3
2..	Sandhigraha (stiffness)	None Mild Moderate Severe difficulty due to stiffness	0 1 2 3
3.	Sandhi Atopa (Crepitus)	No Crepitus Palpable Palpable & Audible Always Audible	0 1 2 3
4.	Akunchana Prasaranayoh Vedana	No pain Pain without winching of face Pain with winching of face Does not allow passive movement	0 1 2 3

## ASSESSMENT OF SHOTHA

Shotha can be measured with the help of  
Level A – 2 inches (5.08cm) above mid patellar point  
Level B – at mid patellar point Level C – 2

inches (5.08cm) below mid patellar point  
measuring tape, Hence it is an objective parameter. In this study Shotha of Janu Sandhi was  
measured at 3 levels in cms.

All measurements were taken. Mean was calculated and effect of a trial is calculated in terms of  
difference between the Shotha before treatment and after treatment.

**Radiological Investigations-** X-Ray of Knee Joint (AP, Lateral View in Standing Position)  
Duration of treatment -: 8 days Duration of follow up -: 16 days Total duration of study-: 24  
days

## STUDY DESIGN

It is a single blind clinical study with pre and post test design where in minimum of 50 patients  
suffering from *Sandhigata Vata* were selected.

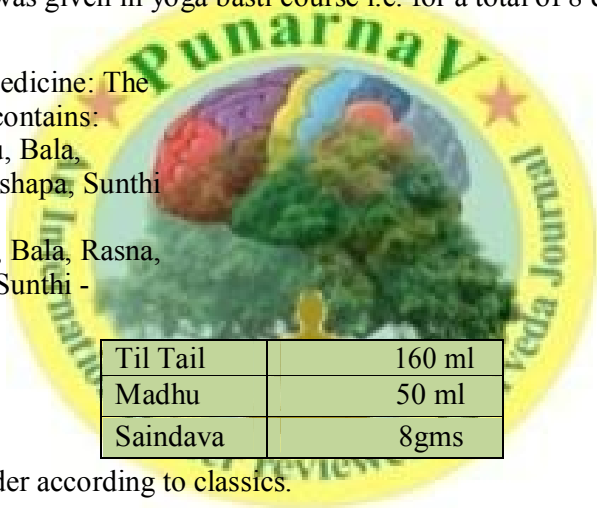
## INTERVENTIONS

Devdarubaladi Basti was given in yoga basti course i.e. for a total of 8 days.

### Poorva Karma:

1. Preparation of the medicine: The  
Devdarubaladi Basti contains:  
Decoction of Devdaru, Bala,  
Rasna, Jatamansi, Sarshapa, Sunthi  
- 400ml

2. Powder of Devdaru, Bala, Rasna,  
Jatamansi, Sarshapa, Sunthi -  
30gms



Til Tail	160 ml
Madhu	50 ml
Saindava	8gms

This was mixed in order according to classics.

2. Preparation of patients by Sthanik abhyanga using Devdarubaladi tail, Sthanik swedana,  
laghu aahar (during anuvasana) and empty stomach (during niruha).

### Pradhana Karma:

#### Basti Schedule

DAY	1	2	3	4	5	6	7	8
BASTI	A	N	A	N	A	N	A	A

A-Anuvasan basti, N-Niruha basti

Anuvasana basti using Devdarubaladi tail was administered after food.  
Devdarubaladi niruha basti was administered empty stomach.

Matra: Devdarubaladi niruha basti = Approx.600 ml)  
Anuvasana basti = 3 palas (120ml)

### Pashchat Karma:

Subjects were asked to sleep in supine position for 10min.  
Parihara kala for 16 days.

**ASSESSMENT CRITERIA:**

Samyak niruhya and anuvasya laxanas were assessed daily after the administration of Niruha and anuvasana basti respectively

The results were assessed on the basis of Signs and symptoms of *Sandhigata Vata* before and After treatment i.e. on 8<sup>th</sup> and 16<sup>th</sup> day after administration of basti

**OBSERVATION & RESULT**

In assessing overall effect of therapy it was seen than out of 50 patients 10% patients were cured, 60% patients got marked improvement and 30% were improved. None of the patients remained unchanged.

**Age-wise Distribution**

Age-wise (Years)	No. Of Patients	Percentage %
41-50	20	40
51-60	17	34
61-70	13	26

**Sex-wise Distribution**

Sex	No. Of Patients	Percentage %
Male	11	22
Female	39	78

**Occupation-wise Distribution**

Occupation	No. Of Patients	Percentage %
Housewife	18	36
Servicemen	21	42
Worker	11	22

**Religion-wise Distribution**

Religion	No. Of Patients	Percentage %
Hindu	42	84
Muslim	8	16

**Involved Knee Joint wise Distribution**

Knee Joint	No. Of Patients	Percentage %
Right	27	54
Left	17	34
Bilateral	6	12

**ASSESS THE EFFECT OF YOGA BASTI IN SANDHIGATA VATA W.S.R. TO  
OSTEOARTHRITIS**

**Symptom-wise Distribution**

<b>Chief complain</b>	<b>BT (0 Day)</b>	<b>After 8 Days</b>	<b>F/U (16<sup>th</sup> Day)</b>
C/O	No. Of Cases%	No. Of Cases%	No. Of Cases%
Sandhishoola	92	44	40
Akunchanprasaran Vedana	100	94	94
Sandhishotha	66	8	8
Sandhi atopa	100	36	32
Sandhi graha	100	88	86

**Average Janu Sandhi Symptoms wise chart**

Janu sandhishoola, sandhi graha, Sandhi atopa, Akunchanprasaran Vedana was assessed before (0 day) and after 8 days treatment and on follow up 16<sup>th</sup> day.

Average of all the symptoms before treatment, after treatment and on follow up is mentioned in chart as follows:

**SYMPTOM-WISE INDEX**

<b>Average Janu Sandhi Symptoms</b>	<b>Before Treatment</b>	<b>After Treatment</b>	<b>F/U (16<sup>th</sup> Day)</b>
Sandhi atopa	2.54	0.36	0.32
Sandhishoola	2.72	0.46	0.46
Akunchanprasaran Vedana	3.32	1	0.98
SandhiGraha	3.02	0.94	0.92

In the present study we found 33 patients having janu sandhishotha. The average janu sandhi shotha before (0 day), after (8days) and follow up (16<sup>th</sup>) is as follows:

<b>Average Janu Sandhishotha</b>	<b>Before Treatment</b>	<b>After Treatment</b>	<b>F/U (16<sup>th</sup> Day)</b>
Sandhishotha	37.46	35.44	35.06

**STATISTICAL ANALYSIS:**

<b>Symptoms</b>	<b>N</b>	<b>S.D</b>	<b>S.E</b>	<b>“t”value</b>	<b>P</b>	<b>Significance</b>
Sandhishoola	50	0.5789	0.08187	15.57	P<0.0001	Extremely
Akunchanprasaran Vedana	50	0.4849	0.06857	23.33	P<0.0001	Extremely
SandhiGraha	50	0.3959	0.05599	32.07	P<0.0001	Extremely
Sandhiatopa	50	0.4712	0.06664	24.22	P<0.0001	Extremely
Sandhishotha	50	2.642	0.4599	13.47	P<0.0001	Extremely

**DISCUSSION**

*Sandhigata Vata* is Madhyama Rog Marg *Vata* vyadhi in which vitiated *Vata* gets lodged in Sandhi. Hence to treat *Sandhigata Vata* drugs acting on

both *Vata* and *Asthi* should be selected. Most of the ingredients of Devdarubaladi have Ushna Virya and Madhura and Katu Vipaka, Tikta Rasa. The tikta rasa increases Dhatvagni



## ASSESS THE EFFECT OF YOGA BASTI IN SANDHIGATA VATA W.S.R. TO OSTEOARTHRITIS

(metabolic stage).As dhatvagni increases, nutrition of all the dhatus will be increased. As a result Asthi Dhatu and Majja Dhatu may get stable and Asthi dhatu and Majja Dhatu kshya will be decreased. So degeneration in the Asthi Dhatu may not occur rapidly. It can be said, it slows down the degeneration processes.

Also these dravya helps in strengthening the bone and prevents further degenerative changes to occur.

### **Probable Mode of Action**

Basti dravya enters into the Pakwasaya.Basti karma helps to increase the absorbing capacity of the colon by its actions. Basti mainly acts on the Pakwasaya, here it nourishes, purifies and expels the unwanted toxins from the body. When hypertonic solution is given in the form of Basti dravya,the introduced fluid circulates from low density to high density solution i.e. from blood vessels to the outer

fluid into the gastrointestinal tract.Basti is important for maintaining the level of myelopoiesis in the bone marrow. Anuvasan basti or Bruhan type basti acts over different systems of the body by virtue of its multidimensional actions.Orthopedic conditions being specifically caused by vitiation of *Vata* dosha are primarily treated with basti.Bone remodelling depends upon the Asthidhara Kala which is nothing but the Purishdhara Kala i.e. structurally the colon. Intestinal flora is one of the main functional units of colon and of Niruha basti nourishes this bacterial flora and maintains the bone health. Gut is the chief organ that is associated with absorption and excretion function of the body. Removal of inflammatory mediators and toxic matters depends upon healthy gut. Basti is helpful to reduce the excess of morbid matter, purifies every channel, and normalizes the function of *Vata*.

### **CONCLUSION**

Yoga basti provided good relief in the symptoms of SandhiShoola, Sandhigraha (Stiffness), Sandhiatopa (Crepitus), Akunchana Prasarana Vedana and also all symptoms were statistically proved highly significant.

SandhiShoola reduced up to 83.08%.

Sandhigraha reduced up to 69.53%.

Akunchana Prasarana Vedana reduced up to 70.48% Sandhishotha reduced up to 87.87%.

Sandhi atopa reduced up to 87.4%.

It also provided comparatively better relief while standing and walking time.

Overall effects provided by Yoga basti were also better. No adverse effects were found.

On the overall effect of Devdarubaladi tail, it has been found that drug helps in pacification of aggravated *Vata* and subside the pain.



REFERENCES

1. Charaka. Charaka Samhita- Agnivesha's treatise refined and annotated by Charaka redacted by Dridhabala with Ayurveda Deepika Commentary of Chakrapani Datta. Varanasi: Chaukambha Krishnadas Academy: reprint 2006 pp.618
2. Sahastrayogam, Dr. R. Nisteshwar; iind Edition, 2008, Chaukhanbha Sanskrit Series, Varanasi; Pp.540, Pg.152. (Taila Prakarana)
3. Arthritis Ireland (2009) 'Facts about Arthritis' accessed at <http://www.arthritisireland.ie/info/facts.php> January 2010
4. Vagbhata, Astanga Hridaya, Dr. Anna Moreshwar kunte, 8<sup>th</sup> edition Chaukhambha Orientalia 2007, Varanasi
5. Sushruta Samhita, Acharya Trikamji, Chaukhambha Orientalia, 8<sup>th</sup> edition 2005, Varanasi, Pp-824, Page No-525.
6. Madhavakara, Madhava nidana, madhukosha Sanskrit commentary and vidyotini hindi commentary by Sudharshan Shastry. Chaukhambha publication, 2008
7. Bhavprakash Nigantu Chaukhamba bharti academy, year 2010
8. Priyavat Sharma-Dravyaguna Vol 2, Chaukhamba Bharti Academy
9. Harrison's principles of internal medicine

