

# WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.084

Volume 8, Issue 11, 802-812.

Research Article

ISSN 2277-7105

# TO STUDY THE EFFICACCY OF MUSTADIYAPAN BASTI IN SANDHIGATA VATA

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Article Received on 30 July 2019,

Revised on 20 August 2019, Accepted on 10 Sept. 2019,

DOI: 10.20959/wjpr201911-15858

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#### **ABTRACT**

Sandhigatavata is the commonest form of articular disease. Sandhigatavata term is formed from two distinct words, Sandhi means a joint and vata means one of three dosha. It is type of vata vyadhi occurs due to dhatukshaya. In modern science Sandhigatavata is called as osteoarthritis. Osteoarthritis (OA) is by far the most common form of arthritis. Its most common symptom is pain and disability. Knee and hip is the principle large joint affected by OA. Knee OA is more prevalent than hip. In the management of sandhigatavata topical NSAID'S and surgery are very costly and poor patients can't afford it so mustadiyapan basti is more cost effective and relevant and easy procedure for all types of patients. In this study total 10 patients having

the complaints of sandhigatavata were treated with mustadiyapan basti and patients got better results in sandhigatavata.

**KEYWORDS:** Sandhigatavata, Osteoarthritis, Mustadiyapan basti.

#### INTRODUCTION

Ayurveda is the science of life. A healthy and higher longevity is always desirable for it. Metabolic and degenerative diseases of connective tissue and joint problem are quite affluent today. During different stages of human life, disease prevalence is common due to genetic, infection, infestation, systemic, environmental and age. In Vridhavastha all dhatus undergo kshaya, thus leading to vataprakopa and making individual prone to many diseases. Sandhigata vata is in top position of list.

Sandhigata vata term is formed from two distinct words, Sandhi means a joint and vata means one of three dosha. Vata dusti occurs due to vata vitiating ahaar and vihar like ruksha aahar, ativyayam, sheeta bhojana, dhatukshaya and roga atikarshana and considered to be main causative factors. This vitiated vata is placed in shelters at sandhisthana & hence degeneration of Asthi dhatu occur and normal structure and function of joint is disturbed and sandhigatavata is produced. So treatment of vitiated vata is important for sandhigatavata; Snehana, swedana and mustadiyapan basti is important treatment for vata. As we see, there are lot of cases are recorded every year in OPD.

In modern science Sandhigatavata is called as osteoarthritis. The overall prevalence of O.A. across the India is 22% to 39% O.A. is more commonly seen in women than men. Nearly 45% women over the age of 65 years have symptoms while 70% those over 65 years show radiological evidence of O.A.

Osteoarthritis (OA) is by far the most common form of arthritis. Its most common symptom is pain and disability. In OA focal loss of articular hyaline cartilage, simultaneous proliferation of new bone with remodeling of joints contour. Inflammation is not the prominent feature of OA. Due to changes in lifestyle and improper food habits, improper sitting and work positions, travelling, enhance OA. Knee and hip is the principle large joint affected by OA. Knee OA is more prevalent than hip. Topical NSAID's use to opioid analgesics oral NSAID's are used for temporary benefits of severe pain. Also intra articular injection is one of treatment measures. Knee Osteotomy artificial hip joints replacements therapies if conservative measures fail. [2]

All the above measures are very costly and poor patients can't afford it so mustadiyapan basti is more cost effective and relevant and easy procedure for all types of patients.

#### AIMS AND OBJECTIVES

To observe the effects of the Mustadiyapan basti in Sandhigatavata.

#### MATERIALS AND METHODS

Patient suffering from sandhigatavata were selected from OPD and IPD of RTAM Akola Nashik University Maharashtra.

#### **Inclusion criteria**

- Classical signs and symptoms of sandhigatavata are Sandhishoola, Sparsha-asahatva, Sandhigraha and Sandhisputan.
- 2. Patients between ages of 30 to 75 years.
- 3. Patients without any anatomical deformities were included.

#### **Exclusion criteria**

- 1. Patients below 30 and above 75 year of age.
- 2. Patient suffering from diseases like DM, Carcinoma, Psoriasis, Vatarakta, Rheumatoid arthritis and tuberculosis were excluded.

# **Drug review**

Basti is considered to be the best treatment to normalize the vata dosha. The Yapana basti have Vatashamak and Rasayana effects on rugna. The drug which is use in Mustadiyapan basti has predominant effect on rugna. Hence it is being a type of niruha basti, does the shodha as well as it gives strength to patient.

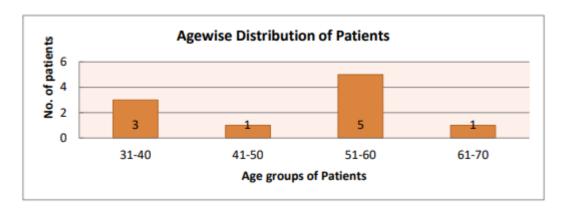
The above yapana basti is usefull for mansavardhana, balavardhana, shula nashak and rasayankar hence it is use in sandhigatavata.

# **OBSERVATIONS**

### **Analysis of Patient**

### Age wise distribution of patients

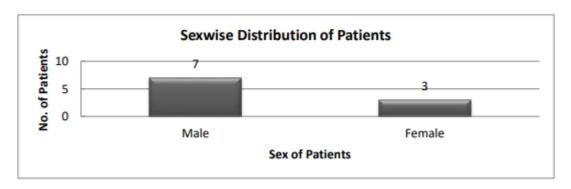
Age	<b>Group of Patient</b>	Percentage
31-40	3	30%
41-50	1	10%
51-60	5	50%
61-70	1	10%
Total	10	100%



In this study maximum number of patients i.e. 50% was belongs to the age group 51- 60 yrs. Followed by 30% to 31-40 yrs age group. 10% patients belong to the age group 61-70 yrs and 10% patients belong to age group of 41-50 yrs.

# **Sex wise distribution of patients**

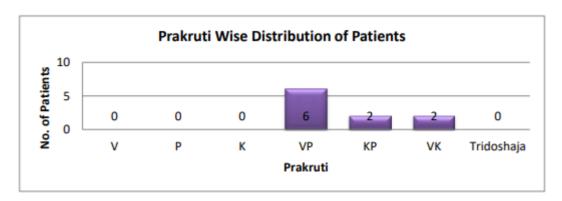
Sex	<b>Group of Patient</b>	Percentage
Male	7	70%
Female	3	30%
Total	10	100%



In this study maximum numbers of patients i.e. 70% were Male and 30% were Female.

# Prakruti wise distribution of patients

Prakruti	Patients	Percentage
V	0	0%
P	0	0%
K	0	0%
VP	6	60%
KP	2	20%
VK	2	20%
Tridoshaja	0	0%
Total	10	100%

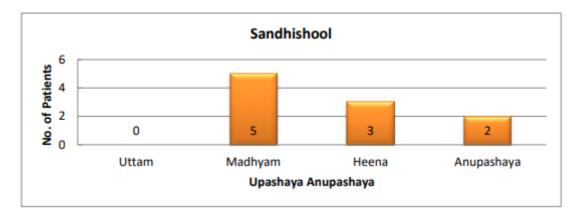


In this study maximum number of patients i.e. 60% patients having vata pittaj prakruti, 20%

patients having kapha pittaj prakruti and 20% patients having vata kaphaj prakruti.

RESULTS
Sandhishool

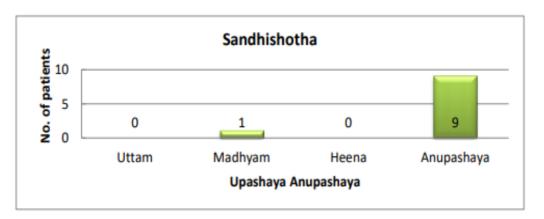
Relief	Upashaya Anupashaya	<b>Patients</b>
75% to <100%	Uttam	0 (0%)
50% to <75%	Madhyam	5 (50%)
25% to <50%	Heena	3 (30%)
0% to <25%	Anupashaya	2 (20%)
	Total	10 (100%)



In this study 0% Patients shows Uttam Upashaya 50% patients shows madhyama Upashaya 30% patients shows Heena Upashaya and 20% patients shows Anupashaya.

# Sandhishotha

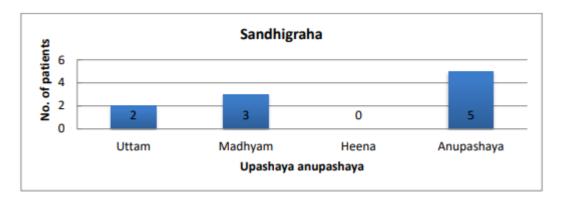
Relief	Upashaya Anupashaya	<b>Patients</b>
75% to <100%	Uttam	0 (0%)
50% to <75%	Madhyam	1 (10%)
25% to <50%	Heena	0 (0%)
0% to <25%	Anupashaya	9 (90%)
	Total	10 (100%)



Out of 10 patients only 3 patients shows Sandhishotha.

## Sandhigraha

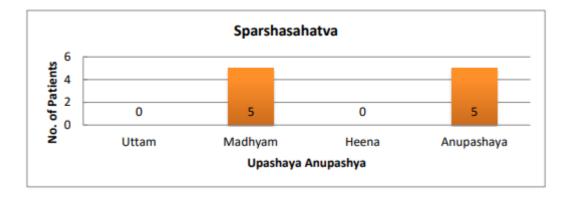
Relief	Upashaya Anupashaya	Patients
75% to <100%	Uttam	2 (20%)
50% to <75%	Madhyam	3 (30%)
25% to <50%	Heena	0 (0%)
0% to <25%	Anupashaya	5 (50%)
	Total	10 (100%)



In this study 20% Patients shows Uttam Upashaya 30% patients shows madhyama Upashaya 0% patients shows Heena Upashaya and 50% patients shows Anupashaya.

# Sparshasahatva

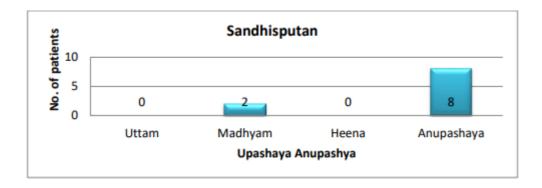
Relief	Upashaya Anupashaya	Patients
75% to <100%	Uttam	0 (0%)
50% to <75%	Madhyam	5 (50%)
25% to <50%	Heena	0 (0%)
0% to <25%	Anupashaya	5 (50%)
	Total	10 (100%)



In this study 0% Patients shows Uttam Upashaya 50% patients shows madhyama Upashaya 0% patients shows Heena Upashaya and 50% patients shows Anupashaya.

# Sandhisputan

Relief	Upashaya Anupashaya	Patients
75% to <100%	Uttam	0 (0%)
50% to <75%	Madhyam	2 (20%)
25% to <50%	Heena	0 (0%)
0% to <25%	Anupashaya	8 (80%)
Total		10 (100%)

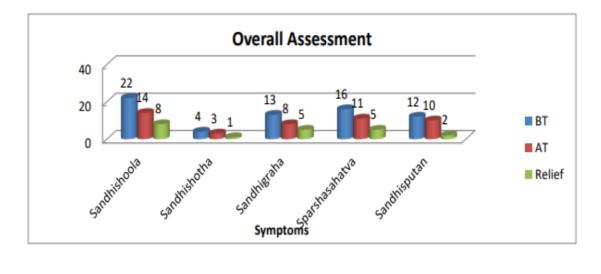


In this study 0% Patients shows Uttam Upashaya 20% patients shows madhyama Upashaya 0% patients shows Heena Upashaya and 80% patients shows Anupashaya.

# **OVERALL ASSESSMENT**

Total effect of therapy shows relief in symptoms of sandhigatavata Experimental group- mustadiyapan basti.

Symptoms	BT	AT	Relief	Relief in %
Sandhishoola	22	14	8	36.36%
Sandhishotha	4	3	1	25%
Sandhigraha	13	8	5	38.46%
Sparshasahatva	16	11	5	31.25%
Sandhisputan	12	10	2	16.67%



#### STATISTICAL ANALYSIS

In this present clinical the main objective of research is to study the efficacy of mustadiyapan basti in sandhigatavata. For this study 10 patients suffering from sandhigatavata were selected randomly from IPD and OPD of Kayachikitsa department of RTAM hospital.

For comparison let us consider following vital parameters Shoola, shotha, Sandhigraha, Sparshasahatva Sandhisputan in this study.

Number of patients (n) = 10

Here we can use pair "t test"

#### Sandhishoola

	Variable 1	Variable 2
Mean	2.2	1.4
Variance	0.4	0.266666667
Observations	10	10
Pearson Correlation	0.748455199	
Hypothesized Mean		
Difference	0	
df	9	
t Stat	6	
P(T<=t) one-tail	0.00010125	
t Critical one-tail	1.833112923	
P(T<=t) two-tail	0.000202499	
t Critical two-tail	2.262157158	

Here the 't' value i.e. 6 > 't' critical (2.262) therefore null hypothesis is rejected; hence we may conclude that the drug is effective in Sandhishoola.

#### Sandhishotha

	Variable 1	Variable 2
Mean	0.4	0.3
Variance	0.48888889	0.233333333
Observations	10	10
Pearson Correlation	0.921132373	
Hypothesized Mean		
Difference	0	
df	9	
t Stat	1	
P(T<=t) one-tail	0.171718198	
t Critical one-tail	1.833112923	
P(T<=t) two-tail	0.343436396	
t Critical two-tail	2.262157158	

Here the 't' value i.e. 1<'t' critical (2.262) therefore null hypothesis is accepted; hence we may conclude that the drug is not effective in Sandhishotha.

# Sandhigraha

	Variable 1	Variable 2
Mean	1.3	0.8
Variance	0.45555556	0.4
Observations	10	10
Pearson Correlation	0.676752968	
Hypothesized Mean		
Difference	0	
df	9	
t Stat	3	
P(T<=t) one-tail	0.007478182	
t Critical one-tail	1.833112923	
P(T<=t) two-tail	0.014956364	
t Critical two-tail	2.262157158	

Here the 't' value i.e. 3>'t' critical (2.262) therefore null hypothesis is rejected; hence we may conclude that the drug is effective in Sandhigraha.

# Sparshasahatva

	Variable 1	Variable 2
Mean	1.6	1.1
Variance	0.266666667	0.1
Observations	10	10
Pearson Correlation	0.272165527	
Hypothesized Mean		
Difference	0	
df	9	
t Stat	3	
P(T<=t) one-tail	0.007478182	
t Critical one-tail	1.833112923	
P(T<=t) two-tail	0.014956364	
t Critical two-tail	2.262157158	

Here the 't' value i.e. 3>'t' critical (2.262) therefore null hypothesis is rejected; hence we may conclude that the drug is effective in Sparshasahatva.

#### Sandhisputan

	Variable 1	Variable 2
Mean	1.2	1
Variance	0.4	0.22222222
Observations	10	10
Pearson Correlation	0.745355992	
Hypothesized Mean		
Difference	0	
df	9	
t Stat	1.5	
P(T<=t) one-tail	0.083925328	
t Critical one-tail	1.833112923	
P(T<=t) two-tail	0.167850656	
t Critical two-tail	2.262157158	

Here the't' value i.e. 1.5<'t' critical (2.262) therefore null hypothesis is accepted; hence we may conclude that the drug is not effective in Sandhisputan.

From the above result we may conclude that drug i.e. Mustadiyapan basti more effective in Sandhishoola, Sandhigraha, and Sparshasahatva than Sandhishotha and Sandhisputan.

#### **DICUSSIONS**

Sandhigatavata vata occurs due to vitiated vata. So Chikitsa of this vitiated dosha is main treatment. In mustadiyapan basti musta, bala, araghwadha, rasna, manjistha, punarnava, bibhitak, guduchi, bala, laghupanchamula, madanphala, milk and meat soup are included. [3]

Musta, guduchi, laghupanchamula are having deepan, pachan property hence this combination reduces agnimandya, amotapatti and increases dhatvagni due to tikta rasa and also nutrition of all the dhatus is increased. As a result degeneration in asthi dhatu is arrested.

Bala, araghwadha, rasna, bibhitak, guduchi, laghupanchamula are having vedanasthapan property and ushna viryatmak hence they reduce vitiated vata and Sandhishoola. Musta, bala, araghwadha, rasna, manjistha, punarnava, bibhitak, laghupanchamula act as shothahara and jwaraghna hence it reduces edema.

Bala, manjistha, shaliparni, prushniparni, gokshur having balyakar property. It gives strength to effected joints and helps in improving dhatukshaya. Guduchi, shaliparni acts as rasayankar, tridoshshamak and help in improving strength, immunity and nutrition to all dhatus.

Ghrita is vata pittashamak, balya, agnivardhaka, madhura, saumya, sheeta, veerya,

jwaraghna, vayasthapaka also.<sup>[4]</sup> It improves general strength of the body. Ghriat is having property like yogavahi which is helpful in increasing bio availability of other drugs without losing its own property.<sup>[5]</sup>

Majja is bala, virya, rasa, kapha, meda and majja vrudhikar. Majja improves strength of bone, reformation of majja dhatu in bone hence it helps to minimize degeneration of bone. <sup>[6]</sup>

Milk is madhur, snigdha, sheeta, mansavardhaka, vrushya, budhivardhaak, doshshamak, agnidipaka gunas. It acts as vatshamak due to above mentioned gunas. So it is useful in mustadiyapan basti and helps in degenerative changes of bone.<sup>[7]</sup>

#### **CONCLUSIONS**

Sandhigatavata occurs due to vitiated vata is placed in shelters at Sandhisthana and normal structure and functions of joints are disturbed. So basti is considered to be the best treatment to normalize the vata dosha.

Ustadiyapan basti due to it as tikta rasa, ushna veerya and tridoshashamak is helpful in sandhigatavata.

Mustadiyapan basti is bala vardhaka, rasayankar hence it is useful in reducing degeneration in asthi.

Sandhigatavata is darun vyadhi so basti upakram should be repeated after 6 months for best results.

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