



CLINICAL STUDY OF *GUGGULU* GOLD AND *GUM SHALLAKI* ALONG WITH *PANCHKARMA* THERAPIES IN THE MANAGEMENT OF *SANDHIGHATA VATA* W.S.R OSTEOARTHRITIS

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ABSTRACT

In *Vridhastha*, most of the *Dhatu Kshaya*, which in turn leads to *Vataprakopa* and thus making individuals prone to many diseases. Among these diseases, *Sandhigata Vata* is one type of *Vata-Vyadhi*, which is the commonest form and occurs mainly due to sitting jobs, air conditioner atmosphere, lack of proper healthy diet, travelling and old age etc. *Sandhigata Vata* is one of the most common *Vatavyadhi*, which can be correlated with osteoarthritis. The prevalence rate of Osteoarthritis is about 14.8 %, in which knee osteoarthritis prevalence rate is 10.8% which is more than the arthritis of other joints¹. The incidence of osteoarthritis in India is as high as 12%. It is estimated that approximately four out of 100 people are affected by it. Osteoarthritis is the most common articular disorder which begins asymptotically in the 2nd & 3rd decades and is extremely common by age 70. Almost all persons by age 40 have some pathologic change in the weight-bearing joint. 25% of females & 16% of males have symptomatic osteoarthritis. When we talk about healthy joints, there is a coating of tough but smooth and slippery tissue, called cartilage, which covers the surface of the bones and helps the bones to move freely against each other. When a joint develops osteoarthritis, part of the cartilage thins and the surface becomes rougher, which in turn doesn't allow the joint to move as smoothly as it should. When cartilage becomes damaged, all the tissues within the joint become more active than normal as the body tries to repair itself. But these repair processes are going to change not only the structure of the joint but will often allow the joint to work normally and without any pain and

stiffness. *Acharya Charaka* has mentioned "*Sandhi Gataanila*", which means vata gets located in the Sandhi and thereafter results in *Sandhigata vata*. Allopathic treatment has its limitation in managing this disease. It can provide either conservative or surgical treatment and can only subside the pain but not cure the cause of diseases. While traditional life science Ayurveda has the most effective solution over this. Local *Abhyanga* and *Nadi Sweda* were selected for the present study in one group, as it has shown best for the *Vata Vyadhis*. Here local *Abhyanga* was given with *Bala Taila* because *Bala Taila* and *Nadi Sweda* are having *Vatashamaka* and *Rasayana* properties. While in the case of another group, *Guggulu gold along with gum shallaki* followed by local *Abhyanga* and *Nadi Sweda* were given to the patients.

Keywords: *Vridhavastha, Dhatus Kshaya, Sandhigata Vata Abhyanga, Vatashamaka, Rasayana, Guggulu gold, Gum Shallaki, Nadi Sweda*

INTRODUCTION

In *Vridhavastha*, most of the *Dhatus* undergo *Kshaya*, which in turn leads to *Vataprakopa* and thus making individuals prone to many diseases. Among these diseases, *Sandhigata Vata* is one type of *Vata-Vyadhi*, which is the commonest form and occurs mainly due to sitting jobs, air conditioner atmosphere, lack of proper healthy diet, travelling and old age etc. *Sandhigata Vata* is one of the most common *Vatavyadhi*, which can be correlated with osteoarthritis. The prevalence rate of Osteoarthritis is about 14.8 %, in which knee osteoarthritis prevalence rate is 10.8% which is more than the arthritis of other joints¹. The incidence of osteoarthritis in India is as high as 12%. It is estimated that approximately four out of 100 people are affected by it. Osteoarthritis is the most common articular disorder which begins asymptotically in the 2nd & 3rd decades and is extremely common by age 70. Almost all persons by age 40 have some pathologic change in weight-bearing joint¹. 25% of females & 16% of males have symptomatic osteoarthritis. *Acharya Charaka* has mentioned "*Sandhi Gataanila*"², which means *Vata* gets located in the *Sandhi* and thereafter results in *Sandhigata vata*. Allopathic treatment has its limitation in managing this disease. It can provide either conservative or surgical treatment and can only subside the pain but not cure the cause of diseases. While in traditional life science, *Ayurveda* has the most effective solution over this. Local *Abhyanga* and *Nadi Sweda* were selected for the present study as it has shown best for the *Vata*

Vyadhis. Here local *Abhyanga* was given with *Bala Taila* because *Bala Taila* and *Nadi Sweda* are having *Vatashamaka* and *Rasayana* properties. In another group *Guggulu gold along with gum shallaki*, local *Abhyanga* and *Nadi Sweda* were given to the patients.

Aim & Objectives

- To observe the effect of *Guggulu gold along with gum shallaki* followed by *Abhyanga, Nadi Swedana* in *Sandhigata Vata*.
- To observe the effect of only *Abhyanga* and *Nadi Swedana* in *Sandhigata Vata*.
- To compare the difference of results in the above treatment groups.

Material & Methods: - 50 Patients, suffering from Osteoarthritis, were selected from O.P.D. and I.P.D. of DAC, Jal Punjab.

Inclusion Criteria

- Classical signs and symptoms of *Sandhigata vata* are *Shula, Shotha, Stambha, Sparsha-asahyata, Sphutana, Akunchana Prasarana Vedana* etc. at the joints².
- Patients between the age group of 40 - 75 years.
- Patients without any anatomical deformity were included.

Exclusion Criteria:

- Patients below 40 and above 75 years of age.
- Patients suffering from a disease like D.M, Carcinoma, Psoriatic arthritis, *Vata Rakta, Phiranga, S.L.E., Polymyalgia Rheumatica,*

kidney failure or any renal disease & Tuberculosis are excluded.

Grouping

Group A: Patients were treated by local *Abhyanga* with *Bala Taila* and *Nadi Swedana* with *Dashamoola Kwatha* along with *Guggulu gold and gum shallaki* 3 2 *Vati* twice a day were given to the patient for 30 days with lukewarm water.

Group B: Patients were treated by local *Abhyanga* with *BalaTaila* and *Nadi Swedana* with *Dashamula Kwatha* for 21 days.

Observations

A total of 50 patients were registered (group A- 31 & group B-18), amongst them in group A, 26 patients had completed the treatment and 06 were drop out.

However, in group B, 14 patients had completed and 04 were drop out.

In this study, a maximum of 45 % patients was found in 45 - 55 years of age group, 59% were female, 94% were Hindu, 97% were married, 37% were primary educated, 41 % were housewives, 5 % belonged to lower middle class, 82 % were from the urban area, 37% had *Samashana* type of habit, 86% had got the gradual type of onset, 50% were found in the chronic stage, 86% were having aggravation of symptoms in the cold season, 67.3% were having a negative family history, 69.4% had *Madhyama Koshtha*, 69.4% were having regular bowel habit & 41 % was in a menopausal state of life.

Table 1: Status wise distribution of 50 patients of *Sandhigata Vata*

Status	Group A Patients	Group B Patients	Total
Completed	26	14	40
Drop out	06	04	10
Total	32	18	50

Vata-Kapha predominance was found in 55 % of patients, 81.6% of patients had got *Madhyama Sara*. *Madhyama Samhanana* was found in 83.6% of patients and *Pramana Pariksha*, *Sthaulya* was found in a maximum number of patients i.e. 51% and *Madhyama Pramana* was found in 33 % of patients, 65.3% were in *Madhyama Satmya* & *Avara Vyayama Shakti* was found in 53% patients. The knee is one of the big weight-bearing joints and thus 94% was found in the involvement of the knee joint. Involvement of other joints i.e. hip, ankle, the shoulder was found 30.6%, 6.12% and 8.16% respectively, *Divaswapna* was found prevalent in 65.30% of patients, *Ati Ruksha Ahara* was found in 51% of patients, *Ati Sheeta Ahara* was found in 40.8% patients, *Ati Vyayama* was found in 38.77% patients, *Ati Alpa Ahara* was a causative factor in

32.65% of patients. Among the risk factors patients of females were 57.14%, obesity was 55.10%, psychological stress was found in prevalent in 28.57%. Apart from this *Vata Vriddhi* and *Vata Prakopa* were found in 100% of patients & *Kaphakshaya* was found in 18.36% of patients.

Among the Chief Complaints *Sandhishula* was found in all cases. In *Sandhigata Vata* there will be aggravation of *Vata Dosha* which is responsible for any kind of *Shula Pradhana Vedana*. *Akunchana Prasaranajanya Vedana* & *Hantisandhigati* was found more in the patients, which occurs due to aggravation of *Vata Dosha* and *Kaphakshaya*. In the chronic stage osteophyte formation occurs due to this *sandhishotha* was seen in a chronic case of osteoarthritis. (Table-02)

Table 2: Chief complaints wise distribution of 50 patients of Sandhigata Vata

Chief complaints	Group A Patients	Group B Patients	Total	Percentage
Sandhishula	31	18	49	100
Sandhishotha	19	10	29	59.1
Akunchana prasarana vedana	23	13	36	73.46
Hanti sandhigata	04	04	08	16.32
Sandhi sphutana	22	11	33	67.34
Sparshasahyata	17	07	24	48.9
Vata Purnadruti Sparsha	08	00	03	6.12

Table 3: Effect of chief complaints in the patients of Sandhigata Vata in Group A

Symptoms	B.T	A.T	Percentage of Relief	S.D	S.E	t	P
Sandhishula	2.38	0.5	77.4	0.54	0.11	16.8	<0.001
Sandhishotha	1.5	0.17	88.9	0.48	0.11	12.09	<0.001
Akunchana Prasarana Vedana	1.8	0.4	77.8	0.58	0.11	12.7	<0.001
Sandhisphutana	1.9	0.6	65.9	0.45	0.09	14.00	<0.001
Sandhisparsha-asahatva	1.5	0.12	91.3	0.6	0.15	8.7	<0.001
Sandhigraha	1.5	0.1	92.3	0.5	0.17	7.8	<0.001

In the case of walking time in group A, the percentage of improvement was 11.15%, while in group B percentage of improvement was found 5.4%, which is insignificant at the level of $p>0.05$. In the case of climbing time in group A, the percentage of relief was 11.88%. While in group B, the percentage of improvement was 9.09%. This result shows statistical significance at the level of $p<0.01$. In group A, in the left knee, the joint flexion percentage of relief was 36.31%, while in right knee joint flexion it was

47.42%. In hip joint flexion (left), the percentage of relief was 38.51% and, in the hip, the joint flexion (right) percentage of relief was found 36.82%, which is statistically highly significant. In group B, in the left knee, joint flexion, the percentage of relief was found 27.05% & in right knee joint flexion, improvement was found 20.15%. While in hip joint flexion (left), the percentage of relief was found 18.85% & in hip joint flexion (right), the percentage of relief was found 14.58% (Table 3-4).

Table 4: Effect of chief complaints in the patients of Sandhigata Vata in Group B

Symptoms	B.T	A.T	Percentage of Relief	S.D	S.E	t	P
Sandhishula	2.3	0.7	68.7	0.65	0.17	9.23	<0.001
Sandhishotha	1.9	0.3	84.2	0.5	0.16	10.00	<0.001
Akunchana Prasarana Vedana	1.6	0.45	72.2	0.4	0.12	9.83	<0.001
Sandhisphutana	1.67	0.8	50.00	0.4	0.11	7.54	<0.001
Sandhisparsha-asahatva	1.5	0.25	83.3	0.5	0.25	5.00	>0.05
Sandhigraha	1.8	0.17	90.9	0.52	0.21	7.95	<0.001

Table 5: Total Effect of therapy on group A & Group B

Gradation	Group A Patients	Group A Percentage	Group B Patients	Group B Percentage
Complete Remission (100%)	04	15.3	01	7.14
Maximum improvement (>75-99%)	16	61.5	02	14.28
Moderate improvement (>50- 75%)	06	23.07	09	64.3
Mild improvement (>25 - 50%)	00	00	02	14.3
No improvement (0-25%)	00	00	00	00

In both the groups (A & B) i.e 15.3% & 07.14% patients achieved complete remission, while 61.5% & 14.28% patients found in maximum improvement and 23.07% & 64.28% were having moderately improvement. No patients found mild improvement in group A whereas 14.28% mild improvement in group B. No patient was found unchanged in both the groups. The above-mentioned data shows that *Guggulu gold along with gum shallaki followed by local Abhyanga and Nadi Swedana* i.e. group A has provided better relief in the disease *Sandhigata Vata* (Osteoarthritis) in the present study.

DISCUSSION

In this study, 44.89% of patients were found in the 41 - 50 years of age group. *Sandhigata Vata* starts at the age of 40 which is the declining stage of *Madhya Vaya*. According to sex, 59 % were female patients, which indicates that *Sandhigata Vata* is more common in females and here the lack of estrogen in the premenopausal period also plays an important role. The modern text also reflects the same type of prevalence, Osteoarthritis or Degenerative Joint Disease (DJD) may first appear without symptoms between 20 and 30 years of age³. The symptoms, such as pain and inflammation, appear in middle age. Till the age of 55, it occurs equally in both sexes; after 55 the incidence is higher in women⁴.

Among the female patients, 40.8 % were in a menopausal state of life. Due to *Dhatukshaya* aggravation of *Vayu* occurs that causes the *Sandhigata Vata*. In the menopausal condition, the deficiency of female hormone leads to different bone and joints problems. While 87.7 % of patients did not have regular exercise in their routine life. Lack of practice or exercise gradually leads to weight gain which ultimately leads to *Sandhigata Vata*. *Prakruti* wise distribution shows that *Vata-Kapha* predominance was found in 55.10% of patients, due to *Vaya* of patients and also intake of the *Vata Vardhaka Nidana*. Among the different *Nidana* of the disease, *Divaswapna* was found in 65.30%. Daytime sleeping increases *Kapha* and *Meda* which leads to weight gain and *Agnivaishamya* which is a common risk factor

for *Sandhigata Vata*. Among the other causative factors *Ati Ruksha Ahara* (51.02%), *Ati Sheeta Ahara* (40.81%), *Ati Vyayama* (38.77%), *Ati Alpa Ahara* (32.65%) also were found. These *Nidana* played an important role in the aggravation of *Vayu* and thus causes *Sandhigata Vata*.

In the case of chronicity, 48.97% of patients were found in the chronic stage & 85.71% were having the gradual type of onset. This data is also supported by literary data. While 85.71% were suffering from Osteoarthritis in the cold season and this season *Vata* usually aggravates and causes the disease. A maximum number of patients i.e. 93.88% had involvement of knee joint. The knee is one of the big weight-bearing joints and thus most affected by Osteoarthritis. Involvement of other joints i.e. hip, ankle, the shoulder was found 30.61%, 6.12% and 8.16% respectively.

Among the risk factors patients of female sex 57.14%, obesity 55.10%, psychological stress 28.57% was found prevalent. These are also supported by the literary data. Osteoarthritis mainly occurs on the weight-bearing joints. Data shows an 11-pound weight reduction, reduce 50% risk for Osteoarthritis. 5% weight loss in overweight patients gives an 18% gain in overall function. So, weight reduction is very important in the case of osteoarthritis.

In both the groups (A & B) i.e 15.38% & 07.14% patients achieved complete remission, while 61.54% & 14.28% patients found in maximum improvement and 23.07% & 64.28% were having moderately improvement. No patients found mild improvement in group A whereas 14.28% mild improvement in group B. No patient was found unchanged in both the groups. In the present study, in affected patients, a knee X-ray was done before and after the treatment, but no changes were observed in any X-ray. No significant change of S. Calcium was found before and after treatment. It shows that there is no direct role of S. Calcium in the aetiology or the prognosis of Osteoarthritis. S. calcium level was found elevated both before and after treatment in female patients of the premenopausal or menopausal period. That may be

due to the Osteoporotic changes of bones, due to lack of oestrogen hormone.

Probable Mode of Action

Sandhigata Vata is *Madhyama Roga Margagata Vatika* disorders in which vitiated *Vata* gets lodged in *Sandhi*. Hence to treat *Sandhigata Vata* drugs acting on both *Vata* and *Asthi* should be selected. According to *Charaka*, in *Asthi Dhatu Dushti* the treatment should be given *Tikta Dravya Ghrita* and *Kshira*. In *Panchatikta Ghrita Guggulu* predominance of *Tikta Rasa* is there.

Tikta Rasa has *Vayu* and *Akasha Mahabhuta* in dominance. Hence it has got affinity towards the body elements like *Asthi* having *Vayu* and *Akasha Mahabhuta* in dominance. Though, *Tikta Rasa* aggravates *Vayu* which may enhance the pathogenic process of *Sandhigata Vata* but, the main principle of *Ayurvedic* treatment is “*Sthanam Jayate Purvam*”. The main site of *Sandhigata Vata* is *Sandhi* which is the site of *Shleshaka Kapha*. So, by decreasing the *Kapha Dosha Tikta Rasa* fulfils the principle.

Due to the *Ushna* property of *Guggulu*, it is one of the major *Vatashamaka Dravya*. Due to its *Ruksha* and *Vishada Guna* it acts as a *Medohara*. According to *Sushruta*, *Guggulu* has got *Lekhana* property which helps in reducing body weight. Due to its *Katu Rasa* it acts as a *Deepana*. This help in the improvement of the general condition of the patient. *Purana Guggulu* also acts as a *Rasayana* which may help to prevent any degenerative change in the body. Pharmacologically *Guggulu* has got the properties of anti-inflammatory, immunomodulatory and antilipidaemic action.

On the overall effect of the *Guggulu gold along with gum shallaki*, it has been found that the drug is

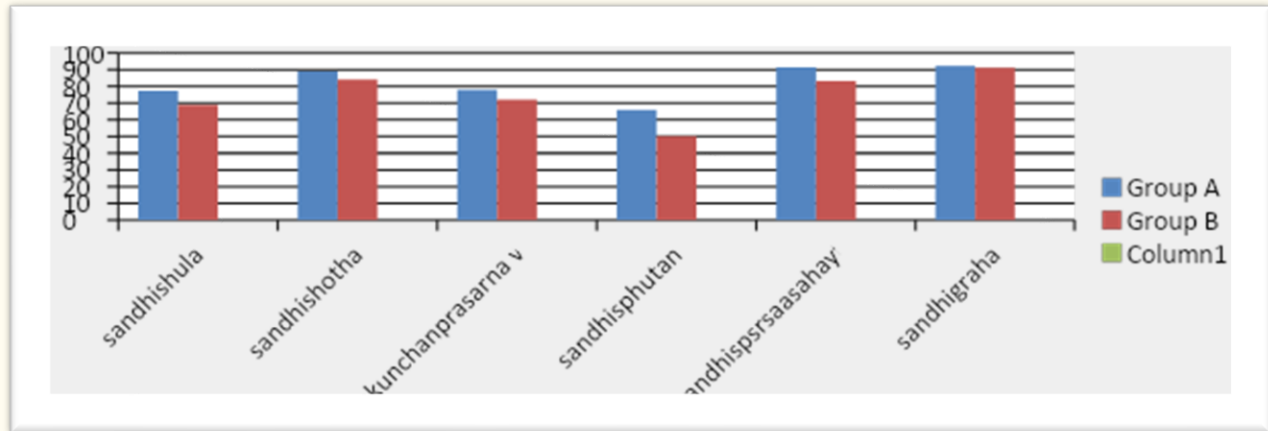
predominant in *Ushna Virya* which helps in the pacification of aggravated *Vata* and subside the pain. *Snehana* pacifies the *Vata*, softens the body and eliminates the accumulated *Malas*. *Swedana* relieves the stiffness, heaviness and coldness of the body and produces sweating. By the process of *Snehana* and *Swedana*, the blood vessels of skin become dilated and local circulation of blood will be increased. The medicine applied locally is also absorbed by the skin and exerts its effects locally.

CONCLUSION

Sandhigata Vata is one of the *Vata Vikara* & it is *Yapya Vyadhi*. *Sandhigata Vata vis-à-vis* Osteoarthritis is multi-factorial, non-inflammatory degenerative joint disorder.

The data shows that *Guggulu gold along with gum shallaki* followed by local *Abhyanga* and *Nadi Swedana* i.e. group A has provided better relief in the disease *Sandhigata Vata* (Osteoarthritis) in the present study. In group A, 15.38% of patients achieved complete remission, while 61.54% of patients found maximum improvement and 23.07% were having moderately improvement. No patients were found unchanged and had mild improvement. In group B, 07.14% of patients obtained complete remission, while 64.28% of patients were having moderate improvement, whereas 14.28% of patients each were having maximum improvement and mild improvement. No patient was found unchanged. There was no apparent change was observed in the x-ray before and after treatment. The present study reveals that the selected management have a potential effect on *Sandhigata vata* with the added advantage of being free from side effects.

Figure 1: Comparative results in both the groups (Group A & Group B)



REFERENCES

1. Ch. 321. 15th Edition 1987. Harrison's Principles of Internal Medicine. [Google Scholar]
2. Acharya Vaidya Jadavaji Trikamji., editor. *Chaukhabha Sanskrita Sansthan*.37. Vol. 28. Varanasi: Chikitsasthan; Agnivesha, Charaka Samhita, with commentary Chakrapanidatta; p. 618.[Google Scholar]
3. *Kumar & Clark Clinical Medicine*. 6th Edition. p. 551. Ch. 10. [Google Scholar]
4. Ibid. (1), Ch. 321. :1987. [Google Scholar]
5. Ibid. (2) *Sutrasthan*. 26(5):144. [Google Scholar]
6. Rose & Wilson, *Anatomy & Physiology in Health & Illness-Elsevier Churchill Livingstone*. Ch. 11.274. [Google Scholar]

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