

A COMPARATIVE STUDY OF SHATAVARI, ASHWGANDHA, YASHTIMADHU CHURNA AND ABHYANGA IN THE MANAGEMENT OF SANDHIGATA VATA

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ABSTRACT

Osteoarthritis is also known as degenerative joint disease or osteoarthrosis. It is a group of mechanical abnormalities involving degradation of joints, including articular cartilage and subchondral bone. The effectiveness of glucosamine is controversial.¹ The most recent reviews found that, it is to be equal or slight better results than placebo. A difference may exist between glucosamine sulfate and glucosamine hydrochloride, with glucosamine sulfate showing a benefit in osteoarthritis. The trial drug i.e. *Shatavari, Ashwagandha and Yashtimadhu churna* has proved better relief in the patients of *Sandhigata Vata* for reducing all the symptoms.

Keywords: *Sandhigat vata, Ashvagandhadi yog, sahachar tail, Abhyanga*

INTRODUCTION

Sandhigata vata is described under *Vatavyadhi* in all the *Samhita*. In *vridhnavastha*, all *Dhatu*s get vitiated, thus leading to *vataprakopa* and making individual prone to many diseases.² Osteoarthritis is the most common articular disorder begins asymptotically in the 2nd and 3rd decades and is extremely common by age 70. Almost all persons by age 40 have some pathologic change in weight bearing joint. 25% females and 16% males have symptomatic OA. The disease Osteoarthritis may be regarded as a reward of longevity. It seems man has paid price for standing on hind limbs in form of osteoarthritis of weight bearing joints of the body. In Modern science, Glucosamine sulfate and glucosamine hydrochloride, with glucosamine sulfate showing a benefit in osteoarthritis.³

Arthritis is second only to heart disease as a cause of work disability. It

limits everyday activities such as walking, dressing, bathing etc., thus making individual handicapped forever.⁴ No treatment is available which can prevent or reverse or blocks the disease process. In Allopathy mainly analgesics, anti inflammatory drugs or surgery are the options for the treatment of Osteoarthritis. These don't give satisfactory relief and also causes great adverse effect. Researchers are looking for drugs that would prevent, slow down or reverse joint damage.

AIMS AND OBJECTIVES

- 1) To study the pathogenesis of *sandhigat vata* and to correlated it with modern science.
- 2) To evolve standard Ayurvedic Therapy for the management of OA.
- 3) To observe the effect of *Abhyang* in *sandhigat vata*.

MATERIAL AND METHODS

All the patients were included having symptoms like *vedana, shotha, sandhigraha*,

sparrhashatva, sandhisphutan in janu sandhi, tenderness, akunchan-prasaranjanya vedana in janu sandhi.

Group A: The combination of *shatavari + Ashwagandha + Yashtimadhu churna*, was given to 30 patients of this group. **Dose:** 3g BD, **Anupana:** *dugdh*, **Duration:** 60 days.

Group B: *Abhyang (bahya snehan)* was done to 30 patients of this group with *sahachar taila*⁵, **Mode:** Local application on *janu sandhi*, **Duration:** For 60 days (everyday)

Selection of patients: The patients who form the material of present clinical study were selected from OPD and IPD of Kayachikitsa department, CSMSS Ayurved College and Hospital, Kanchanwadi, Aurangabad.

Criteria for Selection of Patients: The patients who were having the following signs and symptoms were selected for the clinical trial.

1. The sign and symptoms as mentioned in Ayurvedic text such as *vedana, shotha, sandhigraha, sparshasahatva, sandhisputan, aakunchan prasaran vedna in janu sandhi.*
2. The patient between age group 40 to 70 years of age.

Objective parameters:

1. X-ray of knee joint AP and lateral view.
2. The clinical examination of knee joint.
3. Complete hematology
4. RA factor

Criteria for Exclusion of Patients:

- 1) The patients below 40 years of age and above 70 years.
- 2) The patients suffering from septic, tuberculousis, infective, syphilitic, gonorrhoeal, rheumatic arthritis and gout.
- 3) Hemophilic and neuropathic joints, pott's spine
- 4) Scurvy, ankylosing spondylitis and traumatic arthritis.

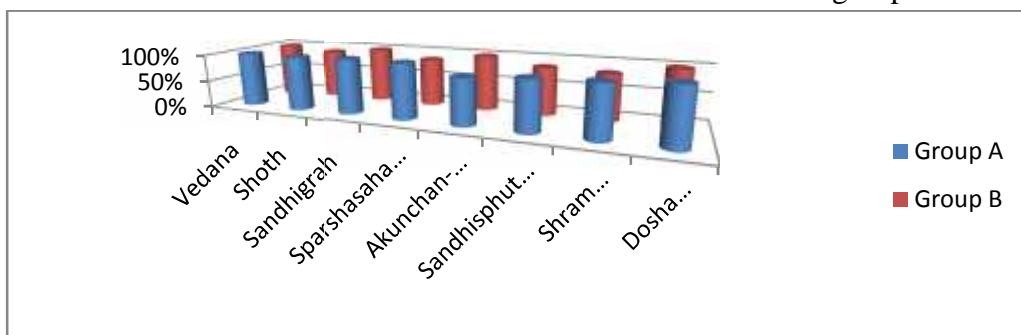
Preparation of drug

The compound drug *Shatavari+Ashvagandha+Yashtimadhu* have taken each 1g fine powder. In another group *Sahachar tail* has given for local application on affected joint. These compounds have prepared in the *Rasa shastra* dept. of C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad.

Assessment of result

The findings of sign and symptoms were recorded every four weeks interval. The assessment of efficiency of drug has been made on the basis of clinical improvement in subjective and objective symptoms and gradation criteria have been categorized in the following manner.

The improvement in the patient was assessed mainly on the basis of relief in the signs and symptoms of the disease. To assess the effect of therapy objectively, all the signs and symptoms were given scoring depending upon their severity. Following figure shows the clinical symptoms wise distribution in both groups.



RESULTS AND OBSERVATION

Table 1: Effect of Shatavari + Ashwagandha + Yashtimadhu Churna (Group A) on chief complaints

Chief Complaints	Mean Score		M.D. (X)	S.D (+)	S.E. (+)	t Value	P	Relief %
	B.T.	A.T.						
Vedana	3.20	1.10	2.10	0.54	0.10	21.00	P<0.001	62.50
Shoth	1.90	0.33	1.56	0.72	0.13	11.78	P<0.001	82.45
Sandhigrah	2.20	0.73	1.46	0.73	0.13	11.00	P<0.001	66.66
Sprshasahatva	1.76	0.30	1.46	0.68	0.12	11.78	P<0.001	83.01
Akunchan prasaranjanya vedana	2.13	0.72	1.40	0.72	0.13	10.59	P<0.001	66.66
Sandhisphutan	1.43	1.33	0.40	0.30	0.05	01.79	P>0.05	06.96
Shram asahayata	1.93	0.47	1.47	0.62	0.11	12.77	P<0.001	75.86
Dosha dushya dushti	2.00	0.9	1.10	0.40	0.07	14.96	P<0.001	55.00

Abbreviations: M.D.=mean difference, S.D.=standard difference, S.E.=standard error, P=P value

Table 2: Effect of bahya snehan (Group B) on chief complaints

Chief Complaints	Mean Score		M.D (X)	S.D (+)	S.E. (+)	t Value	P	Relief %
	B.T.	A.T.						
Vedana	2.70	1.53	1.16	0.59	0.10	10.79	P<0.001	42.96
Shoth	1.63	0.66	0.96	0.61	0.11	8.60	P<0.001	60.00
Sandhigrah	2.03	1.10	0.93	0.58	0.10	8.76	P<0.001	46.50
Sparshasahatva	1.26	0.63	0.63	0.55	0.10	6.25	P<0.001	50
Akunchan prasaranjanya vedana	1.83	1.20	0.67	0.55	0.09	6.67	P<0.001	36.66
Sandhisphutan	1.23	1.30	0.06	0.63	0.11	0.57	>0.05	05.00
Shram asahayata	1.73	1.07	0.67	0.55	0.09	6.67	P<0.001	39.41
Dosha dushya dushti	2.00	1.10	0.90	0.30	0.05	16.15	P<0.001	45.00

Table 3: Effect of therapy on X-ray examination in group A

X-ray examinations	Mean Score		Mean of Diff ^{en} (X)	S.D (+)	S.E. (+)	t Value	P	Relief %
	B.T	A.T.						
Changes of O.A.	2.3	1.76	0.53	0.50	0.09	5.75	<0.001	21.7

The mean score of arthritic changes in X-ray was 2.3 before treatment, which was reduced to 1.76 after the treatment. Here 21.7% relief was obtained which was statistically significant (P>0.001).

Table 4: Effect of therapy on X-ray examination in group B

X-ray examinations	Mean Score		Mean of Diff ^{en} (X)	S.D (+)	S.E. (+)	t Value	P	Relief %
	B.T.	A.T.						
Changes of O.A.	2.2	1.86	0.33	0.47	0.08	3.80	P<0.001	15

The mean score of arthritic changes in X-ray was 2.2 before treatment, which was reduced to 1.86 after the treatment. Thus 15% relief was obtained which was statistically significant (P<0.001).

Table 5: Comparative analysis for X-Ray

	Calculated Value
Mean of Group A	0.53
Mean of Group B	0.33
Combined S.D.	0.49
S. E.	0.12
Degrees of Freedom	58
Level of Significance	5%
t Calculated	1.56
t table	1.676

The above table reveals that, Shatavari+Ashwagandha+Yashtimadhu churna and bahya snehan both are not significant for X-ray changes.

DISCUSSION

The present research work was mainly based on the clinical assessment of the above said sign and symptoms. Effect of therapy was assessed on the basis of scoring chief complaints, blood routine examination mainly Hb%, ESR, joint examination, X-ray examination before and after the treatment.

Effect of therapy on *Vedana* was found 62.50% of relief in group A. The percentage of relief of *Shotha* was 82.45%, *Sandhigraha* was 66.66% of relief, *Sparshasahatva* 83.01%. *Akunchana-prasaranajanya Vedana* 66.66%, *Sandhisphutana* 6.96%, *Shram-asahayata* 75.86%, and *Doshadushya dushti* 55%. Above results shows that statistically highly significant at the level of $P<0.001$

In case of group B, percentage of relief of *vedana* was found 42.96%, *Shotha* was found 60%, *Sandhigraha* was 46.50%, *Sparshasahatva* was 50%, *Akunchana-Prasaranajanya vedana* was 36.66%, *Sandhisphutana* was 5%, *Shram asahayata* was 39.41% and *Doshadushya dushti* was 45% of relief was found highly significant at the level of $P<0.001$.

The effect of therapy on Joint Examination

In group A, right knee joint flexion percentage of relief was 3.17%, while left knee joint flexion was 2.22%. The above mentioned data shows highly significant result at the level of $P<0.001$.

In case of group B, right knee joint flexion percentage of relief was 1.20%, while left knee joint flexion was 1.02%. The above mentioned data shows highly significant result at the level of $P<0.001$.

The effect of Therapy on Laboratory Investigation

In group A, increased Hb% 3.35% and percentage of ESR decreased by 5.90% of studied patients was found statistically highly significant result at the level of $P<0.001$.

In group B, increased Hb% was found 1.8% and ESR decreased by 3.2%. Both the above data shows highly significant at the level of $P<0.001$.

The effect of Therapy on X-ray Investigation

In group A, affected patients X ray was done before and after the treatment, arthritic changes was reduced to 21.70%, this shows highly significant at the level of $P<0.001$.

In group B, affected patients X ray was done before and after the treatment, arthritic changes was reduced to 15%, the above data shows highly significant at the level of $P<0.001$.

Total effect of therapy

In group A, 33.33% patients achieved complete remission, while 56.66% patients obtained marked improvement, 6.66% moderate improvement where as 3.33% patients obtained no improvement was reported in the present clinical study.

In group B, no patients achieved complete remission, while 30% patients obtained marked improvement, 56.66% moderate improvement whereas 13.33% patients obtained no improvement.

The above mentioned data shows that *Shatavari+Ashwagandha+Yashtimadhu churna* i.e. group A has proved better relief in the *Sandhigata Vata*.

Though, the results of both groups proved to be highly effective and also statistically highly significant in different subjective and objective parameters. The result of group A was better than other.

CONCLUSION

Sandhigata Vata vis-à-vis Osteoarthritis is multi-factorial, noninflammatory degenerative joint disorders. There was no apparent change was observed in x-ray before and after treatment. According to the literary profile, the disease is incurable in nature; this is also supported by the recurrence of same type of complaint in the patient included in the present clinical study. The medication can give only symptomatic relief for certain period.

Though the trial drug proves to be an effective remedy for *Sandhigata Vata*, the combination of *Shatavari*+ *Ashwagandha*+ *Yashtimadhu churna* and local application of *Abhyang* also shows good results for the reduction of symptoms. The trial drug was more effective in the management of *Sandhigat vata*. As a result, joints gets more nourishment and its primary and accessory structure become strengthens and helps in early recovery.

The present study, the size of sample was small and period of study was limited. Hence it is difficult to draw a definite conclusion regarding this study. In this context, it is suggested that the study should be continued with large sample and treatment for longer duration. It is expected that the present study will disclose some definite clues to the future researchers.

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Source of support: Nil

Conflict of interest: None Declared