

“TO EVALUATE THE EFFICACY OF RASNA SAPTAK KASAYA ALONG WITH BALA ASHWAGANDHA GHRITA BASTI IN THE MANAGEMENT OF JANU SANDHIGATA VATA (OSTEOARTHRITIS OF KNEE JOINT)”

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Abstract

Sandhigata vata is one which come under vata vyadhi mentioned in Ayurvedic classic characterised by the symptoms such as sandhisula, sandhi sophia (swelling of joint) .According to modern osteoarthritis is a degenerative disorder arising from the bio chemical break down of articular cartilage in synovial joints.. It generally limit the activity of the people in day today life .The prevalence of osteoarthritis generally increases with age. In Ayurvedic classic our acharya have given thousands of medication for specific disease. One among them Rasna Saptak Kasaya and Bala Aswagandha Ghritha basti is selected for the study. 100 Clinically diagnosed patients of osteoarthritis were taken. Patients were selected according to the inclusion and exclusion criteria. Patients were treated with - Rasna Saptak Kasaya (Rasna, Amrita, Devadaru, Aragwadha, Trikantaka, Eranda, Punarnava) Dose- 3-6 gm, Duration- 60 days and Bala Ashwagandha ghritha basti. Dose- 60ml, Duration- 8 days. Follow up were done in 30 days. Assessment of the condition were done on a detailed proforma adopting standard method of scoring, subjective and objective parameters and were statistically analysed by using proper statistical method. After 60 days treatment significant result was found in improvement of Osteoarthritis of knee joint both symptomatically and radiologically in case of maximum number of patients.

No significant side effect were found in case of any patient.

Keywords: *Janusandhigata vata, Osteoarthritis, Rasna Saptak Kasaya, Bala Ashwagandha ghritha basti*

INTRODUCTION

Sandhigata vata is one which come under vata vyadhi mentioned in Ayurvedic classic characterised by the symptoms such as sandhisula, sandhi sophia (swelling of joint) .According to modern osteoarthritis is a degenerative disorder arising from the bio chemical break down of articular cartilage in synovial joints.

However the current view holds that OA involves not only articular cartilages but also the entire joint organ including sub condral bone synovium.

It is almost identical to sandhigata vata described in Ayurveda with respect to etiology, pathology and clinical features.

IT generally begin asymptotically in 2nd and 3rd decades of life. Prevalence of osteoarthritis is reported to be in the range of 17 to 60.6%. 90% of people have radiographic feature in the weight bearing joint mainly the knee joint by the age of 40. Some other major joint are also involved like shoulder hip etc. It generally limit the activity of the people in day today life .The prevalence of osteoarthritis generally increases with age. Many researches were conducted on this disease still complete cure of these is a mirage. In Ayurvedic classic our acharya have given thousand of medication for specific disease one among them Rasna Saptak Kasaya and Bala Aswagandha Ghrita basti is selected for the study.

AIM OF THE STUDY

To evaluate the efficacy of Rasna Saptak Kasaya and Bala Aswagandha Ghrita basti in the management of Sandhigata Vata (osteoarthritis of knee joint)

OBJECTIVE OF THE STUDY

1. To evaluate the efficacy of Rasna Saptak Kasaya and Bala Aswagandha Ghrita basti in the management of sandhigata vata
2. To decrease the morbidity of the disease and improve the quality of life.

MATERIALS AND METHODS:

- a) **Source of data:** Patients from OPD and IPD, Dept. of Kayachikitcha, Govt. Ayurvedic College & Hospital, Guwahati.
- b) **Method of collection of data:** Patient fulfilling the inclusion criteria will be selected for the study.
- c) **Diagnostic criteria:** Sign and symptoms mentioned in Ayurveda for sandhigatavata along with sign and symptoms for osteoarthritis in modern science.

JANUSANDHI VATA

Vatapurna dhruvi sparsha

Sandhi sula

Vedana during akunchan and prasarana

Sandhi hanta

atopa

OSTEOARTHRITIS OF KNEE

Inflamed knee joint

Pain in joint

Pain during extension & flexion

Crepitation

Stiffness of the joint

INCLUSION CRITERIA

- a) Patients of both sexes will be included.
- b) Patients age between 30 -70 years.

- c) To follow the diagnostic criteria of osteoarthritis.
- d) Patients should be fit for basti karma.

EXCLUSION CRITERIA

- a) Patients age bellow 30years and above 70 years.
- b) Patients with past history of rheumatoid arthritis, gouty arthritis, psoriasis, infective arthritis etc.
- c) Patients with past traumatic history.
- d) Complete loss of articular cartilage.
- e) Patients not fit for basti.

ASSESSMENT CRITERIA:

Assessment of the condition were done on a detailed proforma adopting standard method of scoring, subjective and objective parameters and were statistically analysed by using proper statistical method.

SUBJECTIVE PARAMETERS:

1. Vatapurnadrutisparsa (crepitation)
2. Sotha (swelling)
3. Sula (pain)
4. Akunchana prasarana janya vedana (pain during extension and flexion)

OBJECTIVE PARAMETER:

- 1) X-Ray of the joint involved.
- 2) Womac grading.
- 3) Restriction of movements (mild/moderate/severe)
- 4) Crepitation in joint (mild/moderate/severe)
- 5) Swelling in joint (mild/moderate/ severe)

STUDY DESIGN (INTERVENTIONS):

- 1) 100 Clinically diagnosed patients of osteoarthritis were taken.
- 2) Patients were selected according to the inclusion and exclusion criteria.
- 3) Patients were treated with -
 - a) Rasna Saptak Kasaya
Rasna, Amrita, Devadaru, Aragwadha, Trikantaka, Eranda, Punarnava
Dose- 3-6 gm
Duration- 60 days
 - b) Bala Ashwagandha ghrita basti
Dose- 60ml
Duration- 8 days

OBSERVATION AND RESULT

Total 100 patients were enrolled for the present study but 20 patients dropped out various stages during the study, finally leaving 80 patients. General observation of 80 patients of janu sandhigata vata were comprehended as under-

Table no. 1: Sex wise distribution of 80 patients of janu sandhigata vata.

Sex	No. of patients	Percentage (%)
Male	22	27.5%
Female	58	72.5%

Table 1 depicts that 27.5% patients were male and 72.5% were female.

Table no. 2: Age wise distribution of 80 patients of janu sandhigata vata.

Sl. No.	Age (years)	No. of patients	Percentage (%)
1	30- 50	24	30%
2	51- 60	35	43.75%
3	61- 70	21	26.25%

Patients of this series were in the range of 30- 70 years. Maximum number of patients in the study belong to the age group 51- 60 years, followed by 30% of the age group 30- 50 years and 26.25% patients were observed in the age group 61- 70 years.

Table no. 3: Occupation wise distribution of 80 patients of janu sandhigata vata.

Occupation	No. of patients	Percentage (%)
Service	12	15%
Housewife	51	63.75%
Business	5	6.25%
Retired	10	12.5%
Farmer	12	15%

Table no. 4: Habitate wise distribution of 80 patients of janu sandhigata vata.

Habitate	No. of patients	Percentage (%)
Urban	55	68.75%
Rural	25	31.25%

Habitate wise distribution depicts that maximum number of patients belong to urban area.

Table no. 5: Dietary habit wise distribution of 80 patients of janu sandhigata vata.

Diat	No. of patients	Percentage (%)
Vegetarian	12	15%
Non- Vegetarian	68	85%

Table no. 6: Showing incidence of body structure in relation to 80 patients of janu sandhigata vata.

Body structure	No. of patients	Percentage (%)
Thin	17	21.25%
Moderate	30	37.5%
Obese	33	41.25%

Most of the patient were obese i.e. 41.25% followed by 37.5% of patients were of moderate body structure while 21.25% patients were thin built.

Table No. 7: Showing relation of lifestyle in 80 patients of janu sandhigata vata.

Physical activity	No. of patients	Percentage (%)
Active	55	68.75%
Sedentary	25	31.25%

Table 7 illustrates that maximum number of i.e. 55 (68.75%) of patients were having active lifestyle and rest 25 (31.25%) patients have sedentary lifestyle.

Table No. 8: Showing incidence of duration of illness in 80 patients of janu sandhigata vata.

Duration of illness	No. of patients	Percentage (%)
<6 month	17	21.25%
6- 12 month	19	23.75%
1- 3 year	23	28.75%
4-5 years	21	26.25%

Table 8 reveals that 23 patients (28.75%) had a duration of illness 1- 3 year followed by 21 patients (26.25%) having duration of illness between 4- 5 years. 19 patients (23.75%) had duration of illness 6- 12 months and 17 patients (21.25%) had duration of illness less than 6 months.

Table no. 9: Showing incidence of joint involvement in 80 patients of janu sandhigata vata.

Joint involvement	No. of patients	Percentage (%)
Both knee	52	65%
Right knee	16	20%
Left knee	12	15%

Table 9 shows that out of 80 patients 52 patients (65%) had both knee joint involvement, followed by right knee joint involvement in 16 patients (20%) and left knee involvement in 12 patients (15%).

Table no. 10: Showing radiological finding before treatment in 80 patients of janu sandhigata vata.

Finding	No. of patients	Percentage (%)
G ₁	22	27.5%
G ₂	29	36.25%
G ₃	25	31.25%
G ₄	4	5%

G₁- Doubtful narrowing of joint space and possible osteophytes formation.

G₂- definite osteophytes formation, definite narrowing of joint space.

G₃- Moderate multiple osteophytes, narrowing of joint space, sum sclerosis and possible deformity of joint contour.

G₄- Large osteophytes, marked narrowing of joint space, severe sclerosis and definite deformity of bone contour.

Table 11 shows that 29 patients (36.25%) were in grade 2, followed by 25 patients (31.25%) were in grade 3, 22 patients (27.5%) were in grade 1 and 4 patients, (5%) were in grade 4.

Table no. 11: Showing incidence of Ayurvedic symptomatology in 80 patients of janu sandhigata vata.

Symptoms	No. of patients	Percentage (%)
Sandhi shoola	80	100%
Vata purna driti sparsha	68	85%
Prasarna akunchana vedana	75	93.75%
Hanti sandhi	60	75%
Sandhi atopa	55	68.75%

Incidence of Ayurvedic Symptomatology reveals that 80 patients (100%) were having sandhi shoola, 68 patients (85%) were having vata purna driti sparsha. 75 patients (93.75%) were having Prasarna akunchana vedana. 60 patients (75%) were having symptoms of sandhi hanta and 55 patients (68.75%) were having symptoms of sandhi atopa.

RESULT OF THERAPEUTIC PROFILE:

As the sample size was 80 therefore z- test is applied to know the significance of the effect of trial therapy on janu sandhigata vata.

Table no. 12: Effect of therapy on sandhi shoola (joint pain) (N= 80)

N	Mean		SD	SE	Z value	P value	Remarks
	BT	AT					
80	2.5	1.2	3.8	.43	3.02	P< 0.001	Significant

It implies that the effect of therapy on pain is significant.

Table no. 13: Effect on therapy on vata purna driti sparsha (swelling).

N	Mean		SD	SE	Z value	P value	Remarks
	BT	AT					
80	1.6	0.6	1.6	.17	5.88	P< 0.001	Highly Significant

It implies that the effect of the therapy on vata purna driti sparsha after 60 days of treatment is highly significant.

Table no. 14: Effect on therapy on prasarana akunchana vedana (pain on flexion and extension).

N	Mean		SD	SE	Z value	P value	Remarks
	BT	AT					
80	1.8	1	1.37	.15	5.33	P< 0.001	Highly Significant

It implies that the effect of the therapy on prasarana akunchana vedana (pain on flexion and extension) after 60 days is highly significant.

Table no. 15: Effect on therapy on sandhi hanta (stiffness) N= 80.

N	Mean		SD	SE	Z value	P value	Remarks
	BT	AT					
80	1.7	0.8	1.3	.15	6	P< 0.001	Highly Significant

It implies that the effect of the therapy on sandhi hanta stiffness after 60 days of treatment is highly significant.

Table no. 16: Effect on therapy on atopa (crepitation).

N	Mean		SD	SE	Z value	P value	Remarks
	BT	AT					
80	2.5	1.25	.81	.09	13	P< 0.001	Highly Significant

It implies that the effect of the therapy on atopa after 60 days of treatment is highly significant.

The radiological finding of the patients before treatment and after treatment of clinical trial showed slight significant improvement on the radiological finding.

Table no. 16: Effect on therapy on WOMAC scoring.

N	Mean		SD	SE	Z value	P value	Remarks
	BT	AT					
80	BT	AT	11.41	1.26	7.25	P< 0.001	Highly Significant
	57.2	48.5					

It implies that the effect of the therapy on WOMAC scoring after 60 days of treatment was highly significant.

DISCUSSION

In the present study rasna saptak kadha as oral medication and bala ashwagandha ghrita as matra vasti has been selected for the patients of sandhigata vata. Rasna saptak kadha has been mentioned in vata vyadhi chapter of bhaisajyaratnavali which contain rasna, amrita, aragbadha, devadaru, trikataka, erranda, punarnava. It is said to be used for jangha, uru, pristha, trika and prashashula. Rasna is mention as drug for vatahara in charak samhita. Aragbadha has guru & madhurguna and for that it is vedana sthapak and vata shamak. Eranda has been mentioned as one of the best vatahara drug and it is also mentioned in angamarda prashamak mahahashaya. Gokshur is one of the component of dashamool and so it vatahara and rasayana properties. That is why is helpful for degenerative condition. Punarnava has sothahara, vedanasthapan and deepan pachan quality.

Again bala and ashwagandha has been added as ingredient of matra vasti as both of them are balya, vatahara and hence rasayana properties. Vasti is mentioned as the half of the treatment of vata vyadhi. So matra vasti containing ghee as sneha has been selected, as it is vata pittashamak, rasayan, valya and yogavahi.

Observation and statistical analysis shows that in demographic profile out of 80 patients majority were female contributing total 72.5%. The major age group affected with knee osteoarthritis was the age group 51- 60 years (43.75%). Maximum number of patients were housewife (63.75%). Relationship with life style showed that maximum patient belonged to having active life style. Because house wives are more prone to active life style like squatting, moping floors, cooking etc. Majority were non-vegetarian (8.5%). Maximum patient belonged to urban areas (68.75%). Majority were obese (41.25%) based on body mass index.

In clinical profile major duration of illness was 1- 3 year i.e. 28.75%. Incidence of joint involvement were maximum with both knee joints (65%). Radiological finding the patients before treatment was maximum of the group of G₂ i.e. osteophyte formation and narrowed joint space (36.25%).

If we see towards the incidence of Ayurvedic symptomatology, 100% of patients were having shola, 85% were having prasarana akunchana vedana, 75% were having sandhi hanta and 68.75% well having sandhi atopa.

The result of therapeutic trial showed that- the effect of both rasna saptak kadha & matra vasti with bala ashwagandha ghrita on all the five criteria is highly significant i.e.- sandhi hanti, sandhi atopa & vata purna dristi sparsha etc. In all the criterias p values are less than 0.001 after 60 days of treatment with oral medication and 8 days of matra vasti.

Radiological finding of the patients also showed significant improvement.

CONCLUSION

- ❖ Statistically, positive and effective response of the Trial Therapy – Rasna shaptak and bala ashwagandha ghrita matra basti was found.
- ❖ The Pharmacodynamics Properties of the trial drugs satisfy the chikitsa sutra of Sandigatavata/ Osteoarthritis.
- ❖ Symptoms like pain, restricted movement, swelling, stiffness and crepitus were reduced after treatment of 60 days and patients could perform their daily activities with less effort. Patients could sit well on the ground after treatment, walking distance is increased, can climb stairs, and also improved the routine activity.
- ❖ There was slight significant result regarding radiological findings
- ❖ During the treatment period no major adverse or side effects were seen. Thus it indicate the non-toxicity and safety of the drug.

Thus, it could be concluded that Rasna shaptak as oral medicines for 60 days along with Bala ashwagandha Ghrita Basti (Matrabasti) for 8 days showed significant improvement on all the parameters of Janusandhigata vata.

REFERENCES:

- 1) Charak samhita of Agnivesh, vol. II by Dr. Brahmananda tripathi, Chikitsa sthana 28/15-18, 37, pp937, 942.
- 2) Sushrut samhita of Maharsi Sushrut, edited with Ayurveda tattva Sandipika, hindi commentary by kaviraja Ambika dutta shastri, part-i, edition; Reprint 2009 Chikitsa Sthana 4/8,pp-34,nidana sthana 1/27-28, pp298.
- 3) Astanga Hriday of Vagbatta by Dr. Brahmananda tripathi, edition:reprint 2015 chikitsa sthan 21/22.
- 4) Cakradatta of chakrapani data by Dr Indradeva tripathi 25/7, 22/10 ,reprint edition: 2005 pp-166.pp-141
- 5) Charak samhita of agnivesh, vol.I, by- Dr Brahmananda Tripathi sutra sthana 4/9.
- 6) Bhavaprakash Samhita, Vatavyadhi Chikitsa by Dr. Sri Harihar Prasad Pandey.

- 7) A Comparative study of Matra Basti and some indigenous compound drugs in the management of Sandhigata Vata (osteoarthritis), P.G. Thesis, 2006, Jamnagar by Mayuri Shah.
- 8) Handbook of Ayurvedic Medicinal Plants by L.D. Kapoor.
- 9) A text book of Kayachikitsa by Dr. P.S. Byadgi, Dr. A.K. Pandey
- 10) Bhaisajya Ratnavali by Kaviraj Govind Das Sen, edited with Siddhiprada Hindi Commentary by Prof. Siddhi Nandan Mishra, edition, reprinted, 2009.
- 11) Harrison's Principles of Internal Medicine, 19th Edition.
- 12) Epidemiology of osteoarthritis (Yuqingzhang, D.Sc and Joanne MJordan, MD, MPH) Clin Geriatr Med. 2010 August; 26(3): 355-369 .doi10. 1016/j.cger. 2010.03.001.

