



Clinical Research

Clinical effect of *Nirgundi Patra pinda sweda* and *Ashwagandhadi Guggulu Yoga* in the management of *Sandhigata Vata* (Osteoarthritis)

Alpesh Joshi¹, Charmi S. Mehta², Alankruta R. Dave³, V. D. Shukla⁴

¹M.D.(Ayu.), Medical Officer, Government of Gujarat, ²Lecturer, Department of Kayachikitsa, J.S. Ayurveda College, Nadiad, Gujarat, ³Associate Professor, Department of Kayachikitsa, Institute for Post Graduate Teaching and Research in Ayurveda, Gujarat Ayurved University, Jamnagar, ⁴Ex. Head, Department of Panchakarma, Institute for Post Graduate Teaching and Research in Ayurveda, Gujarat Ayurved University, Jamnagar, India

Abstract

Sandhigata Vata is one among the 80 *Nanatmaja Vata Vyadhies*. *Sandhigata Vata* and Osteoarthritis have common symptoms, and hence, both are considered as similar entities by a majority of Ayurvedic scholars and same has been adopted here. Osteoarthritis is the most common joint disease among human beings today. In this study, a total of 116 patients were registered, out of them 101 patients had completed the full course of treatment, while 15 patients left against medical advice. The 101 patients of *Sandhigata Vata* were treated in two groups. Group A: In this group 50 patients of *Sandhigata Vata* were treated with *Nirgundi Patra pinda sweda* for 21 days and *Ashwagandhadi Guggulu Yoga* 3 g/day for 45 days was given orally. Group B: In this group 51 patients of *Sandhigata Vata* were treated with only *Ashwagandhadi Guggulu Yoga* 3 g/day for 45 days. To assess the effect of the therapy objectively, all the signs and symptoms of *Sandhigata Vata* were given a score, depending upon their severity. Also functional tests like walking time, climbing stairs, and joint movement, were measured as a criteria for assessment. Both the groups showed good results, but Group B showed better results in comparison to group A.

Key words: *Ashwagandhadi Guggulu Yoga, Nirgundi Patrapinda Sweda, Osteoarthritis, Sandhigata Vata*

Introduction

Sandhigata Vata has been described in the *Vata Vyadhi* Chapter in classical texts. As per modern medical science, Osteoarthritis (OA) is characterized by focal loss of cartilage, with evidence of accompanying periarticular bone response in the form of subchondral bone sclerosis and attempted new bone formation in the form of bony overgrowths called osetophytes.^[1] Osteoarthritis is the most common joint condition.^[2] The most common form of arthritis, accounts for more than 85% of the arthritic cases. Most people find osteoarthritis to be a nuisance that eventually becomes significant enough to impact their daily activities, but sometimes there are more serious complications. The possible complications of osteoarthritis include chondrolysis, osteonecrosis, hair line crack in the bone, infection in the joint, and deterioration or rupture of the tendons and ligaments around the joint, leading to loss of stability, and so on.

Address for correspondence: Dr. Alankruta Dave, Associate Professor, Department of Kayachikitsa, IPGT and RA, Gujarat Ayurved University, Jamnagar, India.
E-mail: alankruta@yahoo.com

In modern medical science, OA can be managed with analgesics and Nonsteroidal Anti-inflammatory Drugs (NSAIDs), joint replacement surgery, and the like. Recent studies on NSAIDs published in JAPI (Journal of the Association of Physicians of India) suggest that these drugs do increase the risk of chronic renal disease. NSAIDs, although beneficial, have adverse effects, such as, liver toxicity, aseptic meningitis, renal failure, and toxic dermal macrololysis. Also, surgery does not give long-lasting results in many patients. Keeping all these views in mind, the study was planned to find safe, effective, and lasting treatment options for osteoarthritis.

Acharya Charaka has given common principles of *Vata Vyadhi Chikitsa*, that is, repeated use of *Snehana* and *Swedana*.^[3] According to *Acharya Sushruta*, *Snehana*, *Upanaha*, *Agni karma*, *Bandhana* and *Mardana* are the principles for the treatment of *Sandhigata Vata*.^[4] Thus, taking these principles into consideration; *Abhyanga*, *Swedana* and *Shamana* therapy were selected for the present study.

Aims and objectives

1. To observe the effect of *Nirgundi Patra pinda sweda* in *Sandhigata Vata*

2. To observe the effect of *Ashwagandhadi Guggulu Yoga* in *Sandhigata Vata*

Materials and Methods

Literary material — A detailed study of *Sandhigata Vata* and Osteoarthritis was done along with a study on the drugs selected for the present study. Various books of *Ayurveda*, Modern Science, and the Internet, related to the subject, were referred.

Drugs — *Nirgundi* and *Tila Taila* are the main drugs used in *Patra Pinda Sweda*. *Ashvagandha*, *Rasna*, *Chopachini*, *Pippali Moola*, *Shuddha Kupilu*, *Nirgundi*, *Shallaki* and *Guggulu* are the main contents of *Ashwagandhadi Guggulu Yoga*.

Clinical material — A total of 116 patients fulfilling the criteria of the disease were selected from the OPD and IPD of the *Panchakarma* Department of I.P.G.T. and R.A. Hospital, Jamnagar, and randomly divided into two therapeutic groups, irrespective of their age, sex, religion, and so on.

Group A: In this group, 51 patients were registered, out of whom 50 completed the full course of the treatment, while remaining one left the treatment against medical advice.

Group B: In this group, 65 patients were registered, out of whom 51 completed the full course of the treatment, whereas, the remaining 14 left the treatment against medical advice.

Inclusion criteria — Patients between the age group of 30 and 60 years, having classical signs and symptoms of *Sandhigatavata* (Osteoarthritis), and not having any anatomical deformity, were selected for the present clinical research work.

Exclusion criteria — Patients less than 30 and more than 60 years of age, having symptoms of other forms of arthritis and anatomical deformity were excluded.

Criteria for diagnosis

Patients having signs and symptoms of *Sandhigata Vata*, as described in Ayurvedic texts, were selected for the clinical trial. A detailed history was taken and physical examination was done on the basis of a special proforma incorporating all the signs and symptoms of the disease.

Investigations — Routine hematological and biochemical investigations like random blood sugar, s. cholesterol, s. uric acid were carried out in selected patients to exclude any other pathology as well as to assess the present condition of the patients. R. A. factor was carried out in the patients where it was required for differential diagnosis. The diagnosis was confirmed by x-ray examination of the involved joints wherever possible.

Grouping pattern

Group A — In this group, patients were given *Nirgundi Patra pinda sweda* for 21 days with a three-day interval after every week, along with administration of *Ashwagandhadi Guggulu Yoga* 3 g/day in the form of tablets, thrice a day, for 45 days, with lukewarm water.

Group B — The patients in this group were administered only *Ashwagandhadi Guggulu Yoga* 3 g/day in the form of tablets, thrice a day, for 45 days, with lukewarm water.

Method of administration of *Patrapinda sweda*

Requirements

- 250 g fresh leaves of *Nirgundi* (*Vitex nigundo*)
- 18" square cotton cloth two pieces
- Approximately 5' long cotton thread
- Vessel having a round bottom, for frying herbal leaves
- *Tila Taila*

Preparation of the *Patrapinda* (Leaves Pack): Fresh *Nirgundi* leaves are cut into small pieces and then taken in a vessel with a round bottom. About 100 ml of *Tila Taila* is added to this. With continuous stirring the leaves are then fried. These fried leaves are used for the preparation of packs. The cotton cloth is spread on the working table. About 250 gm of fried leaves are placed on the cloth. The free corners of cloth are approximated to cover the leaves. The free ends of the cloth are folded in its middle and are then tied with a cotton thread to make a round pack with handle.

Heating of the packs: In a round bottomed vessel, 100 ml of *Tila Taila* is taken and heated. The packs of herbal leaves are placed on the *Taila*. The packs must be continuously moved stirring in the oil, if the herbal pack is not moved, there is every possibility that the portion of the herbal pack in touch with the heated vessel gets burnt. When the pack is properly heated it is taken out of the vessel. Any oil flowing from the pack is mopped to the edge of vessel. Now the packs are ready for use in sudation procedure.

Preparation of the patient: No specific preparation of the patient is needed and this procedure can be performed at any time of the day depending upon the requirement. This is the unique procedure for applying heat to a portion of the body and it is not usually preferred that the whole body be subjected to *Swedana Karma*. For the same reason depending upon the comfort of the patient *Swedana* may be performed in the sitting position or lying down position.

Application of *Pinda Sweda*: First the medicated oil is smeared on the affected joint, then the therapist massages the affected joints by moving his palm in a circular fashion. Heat is applied to the joint by using this heated herbal packs. To begin with the therapist should confirm the heat in the pack by touching the pack on the dorsum of his hand. Then the heat is applied to the patient's body for *Swedana*. For this purpose, herbal packs may be momentarily touched on the joint or they may be moved on the joint. By the earlier stated maneuvers, when the heat in the herbal pack is minimum, the therapist should place the pack above and beneath the body part to be treated. This is placed till the herbal pack loses its temperature completely or the temperature in the pack equalizes with that of the body temperature. Sudation is then continued by taking another pack of herbal leaves, which is kept in the vessel for heating, in a similar manner. In this way, sudation is continued for about an hours. This completes the procedure of *Patra Pinda Sweda*.

Criteria for assessment

The improvement in the patients 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 a score depending upon their severity.

The following periodical functional tests were carried out for objective assessment of the improvement of Sandhivata patients.

Walking time — The patients were asked to walk a distance of 25 feet, and the time taken was recorded before and after the treatment.

Climbing stair test — The patients were asked to climb a 25 staircase up and down and the time was recorded before and after the treatment.

Joint movement — The range of movement of each affected joints was measured by using the goniometer, both before and after the treatment.

Overall effect of therapy

Marked improvement — Above 75% relief in the clinical signs and symptoms

Moderate improvement — 51–75% relief in the clinical signs and symptoms

Mild improvement 26 — 50% relief in the clinical signs and symptoms

No improvement 0 — 25% relief in the clinical signs and symptoms

Statistical analysis — The data obtained on the basis of observations were subjected to statistical analysis in terms of mean, percentage, standard deviation, and standard error. The 't' test and 'p' values were calculated by using paired 't' test and considered at the level of $P < 0.05$ and $P < 0.10$ (Insignificant), $P < 0.01$ (significant), and $P < 0.001$ (highly significant), to carry out the results.

Observations

In this study, the maximum number of patients, 25.86% belongs to the 50-60 years age group, 63.79% were female, 100% were having a gradual onset, and 56.03% had chronicity up to one year.

In this study, 56.03% had a positive past history, 69.83% had a negative family history, 85.34% had a *Katu Rasa*-dominant diet, and 34.48% had *Adhyashana*; 49.14% of the patients were doing light exercise in their routine life, 37.07% had tension, and 58.11% were having menopause.

All the patients had *Dwandwaja Prakruti*, with a maximum number of patients, that is, 51.72% having *Vata-Kapha Prakruti* and 28.45% having *Vata-Pitta Prakruti*; 68.97% had *Rajasika* type of *Manasa Prakruti*.

In *Aharaja Nidana*, a maximum number of patients, that is, 69.83% had *Asatmya Ahara*, 63.79% had *Ati Katvadi Rasa Sevana*, and 62.07% had *Ati Ruksha Ahara*. In *Viharaja Nidana*, a maximum number of patients, that is, 49.14% had *Ati Cheshta*, 39.66% had *Vegavidharana*, 36.21% had *Ati Ratrijagrana*, and 32.76% had *Ati Vata Atap Sevana*. In *Manasika Nidana*, a majority of the patients, that is, 41.38% had *Chinta* and 12.93% had *Ati Krodha*.

Considering the risk factors, 83.62% had repetitive stress, of whom 63.69% were females, 42.24% had psychological stress, it was hereditary in 25.00%, and 22.41% had obesity.

With regard to cardinal symptoms, 100% of the patients had *Sandhishula*, 96.55% had *Sandhigraha* and *Akunchana Prasaranajanya Vedana*, 87.93% had *Sandhishotha*, 86.21% had *Sandhisphutana*, and 55.17% had *Sparsha sahyata*.

The associated symptoms obtained were *Daurbalya* (78.45%), *Angamarda* (74.14%), and so on.

All the patients (100%) were found to have knee joint involvement and only 4.31% had ankle joint involvement.

Results on cardinal symptoms

Effect of therapy on X-ray examination

On considering the effect on X-ray examination, the mean gradation was 00.58 before treatment and it slightly decreased to 00.46 after the full course, which showed 20.68% improvement in group A, whereas, the initial mean score was 00.62, and it mildly reduced to 00.52 after the completion of treatment. Thus, 15.62% relief was obtained in group B. Here both the groups were found to be statistically insignificant.

In Group A, marked improvement was seen in 18.00% of the patients, while moderate improvement was seen in 48.00%, whereas mild improvement was found in 32.00% and only 02.00% of the patients had no improvement. However, in group B marked improvement was seen in 01.96%, followed by moderate improvement in 19.60%, and mild improvement in 66.36%; and 11.76% of the patients came under the no improvement category [Tables 1-11].

Table 1: Scoring pattern for signs and symptoms

	Score
Shula (Pain)	
No pain	0
Mild pain	1
Moderate pain, but no difficulty in walking	2
Slight difficulty in walking due to pain	3
Severe difficulty in walking	4
Shotha (Swelling)	
No swelling	0
Slight swelling	1
Moderate swelling	2
Severe swelling	3
Sandhigraha (Stiffness)	
No stiffness	0
Mild stiffness	1
Moderate stiffness	2
Severe difficulty due to stiffness	3
Severe stiffness for more than 10minutes	4
Sandhisphutana (Crepitus)	
No crepitus	0
Palpable crepitus	1
Audible crepitus	2
Sparsha Asahyata (Tenderness)	
No tenderness	0
Patients says tenderness	1
Wincing of face on touch	2
Patient does not allow to touch the joint	3
Akunchana Prasaranajanya Vedana (Pain during extension and flexion)	
No pain	0
Pain without wincing of face	1
Pain with wincing of face	2
Prevent complete flexion	3
Patient does not allow passive movement	4

Table 2: Effect of therapy on Sandhishula

Sandhishula	'n'	Mean score		% of relief	SD (±)	SE (±)	't'	P
		BT	AT					
Group A	50	02.76	01.08	60.87	0.62	0.09	19.31	<0.001
Group B	51	02.96	01.62	45.03	0.52	0.07	19.00	<0.001

Table 3: Effect of therapy on Sandhishotha

Sandhishotha	'n'	Mean score		% of relief	SD (±)	SE (±)	't'	P
		BT	AT					
Group A	46	01.52	00.48	68.57	00.66	00.09	11.55	<0.001
Group B	41	01.70	00.85	51.42	00.55	00.09	09.77	<0.001

Table 4: Effect of therapy on Sandhigraha

Sandhigraha	'n'	Mean score		% of relief	SD (±)	SE (±)	't'	P
		BT	AT					
Group A	50	02.30	01.08	58.26	0.57	0.08	16.75	<0.001
Group B	48	02.44	01.47	39.31	00.67	00.09	10.66	<0.001

Table 5: Effect of therapy on Sandhisphutana

Sandhisphutana	'n'	Mean score		% of relief	SD (±)	SE (±)	't'	P
		BT	AT					
Group A	42	01.80	00.80	55.26	1.93	0.29	3.45	<0.01
Group B	46	01.80	01.26	30.12	0.65	00.09	06.00	<0.001

Table 6: Effect of therapy on Sparshasahyata

Sparshasahyata	'n'	Mean score		% of relief	SD (±)	SE (±)	't'	P
		BT	AT					
Group A	31	01.67	00.83	50.00	0.45	0.08	10.37	<0.001
Group B	26	01.62	01.00	38.09	00.50	00.10	06.20	<0.001

Table 7: Effect of therapy on Akunchana Prasaranajanya Vedana

Akunchana Prasaranajanya edana	'n'	Mean score		% of relief	SD (±)	SE (±)	't'	P
		BT	AT					
Group A	48	02.02	00.79	60.82	00.52	00.08	15.37	<0.001
Group B	49	02.20	01.22	44.44	00.67	00.09	10.77	<0.001

Table 8: Effect of therapy on knee joint movement

Knee joint movement	'n'	Mean score		% of relief	SD (±)	SE (±)	't'	P
		BT	AT					
Group A	49	109.79	128.87	17.37	04.16	0.59	32.33	<0.001
Group B	51	118.33	127.64	07.87	06.08	00.85	10.95	<0.001

Table 9: Effect of therapy on walking time

Walking time	'n'	Mean score		% of relief	SD (±)	SE (±)	't'	P
		BT	AT					
Group A	50	20.90	15.00	27.36	02.72	0.38	15.05	<0.001
Group B	51	19.05	16.98	10.91	01.55	00.22	09.40	<0.001

Table 10: Effect of therapy on climbing stair time

Climbing stair test	'n'	Mean score		% of relief	SD (±)	SE (±)	't'	P
		BT	AT					
Group A	50	29.54	23.14	20.78	02.60	0.36	17.05	<0.001
Group B	51	31.27	27.45	12.22	02.82	00.39	09.79	<0.001

Table 11: Overall effect of therapy

Effect	Group A		Group B	
	Patients	%	Patients	%
Marked improvement	09	18.00	01	01.96
Moderate improvement	24	48.00	10	19.60
Mild improvement	16	32.00	34	66.36
No improvement	01	02.00	06	11.76

Discussion

The present study reveals that all the patients (100%) were complaining of *Sandhishula*. Maximum numbers of patients were having complaints of both *Sandhigraha* and *Akunchana Prasaranajanya Vedana*, that is, 96.55% followed by 87.93% patients who were complaining of *Sandhishotha*, 86.21% patients had *Sandhisphutana* and 53.45% patients had *Sparshasahyata*. It can be stated that all the symptoms occurred due to *Vata Prakopa* and *Kapha Kshaya*. Also *Asthi Dhatu Dushti* and *Majja Dhatu Dushti*, which were caused by *Nidana Sevana* and *Vata Prakopa*, were also responsible for the manifestation of the symptoms.

All the patients (100%) were having knee joint (*Janu Sandhi*) involvement and only 4.31% of the patients had ankle joint (*Gulpha* joint) involvement. It can be concluded that *Sandhivata* of knee joint is most common. It supports the theory that this disease occurs mostly in weight bearing joint.

Effect of therapy on cardinal symptoms

In the symptom of *Sandhishula*, both the groups provided highly significant relief ($P < 0.001$), but percentage-wise, 60.87% relief was observed in Group A, while in group B it was 45.03%. Thus the best relief was seen in patients of Group A. Pain was produced mainly by *Vata Prakopa* and *Swedana*, and the best treatment was *Shamana* of *Prakupita Vata*. Therefore, this may be one of the reasons that better relief was found in group A in comparison to group B.

In *Sandhishotha* both the groups provided statistically highly significant ($P < 0.001$) relief, but percentage-wise relief of 68.57% was seen in group A and 51.42% in group B, hence, Group A therapy provided better relief in *Sandhishotha* than Group B therapy. *Prakupita Vata* got localized in *Asthi Sandhi* and produced *Srotorodha*. It occurred due to *Vata Sanga*, which was responsible for *Shotha*. *Patra pinda sweda* induced *Srotoshodhana* and regulated *Vata Dosha*, which resulted in *Shotha* being decreased.

In the present clinical study, a statistically highly significant result ($P < 0.001$) was observed in both the groups in the symptoms of *Sandhigraha*. However, percentage-wise more relief was found in group A, that is, 58.26% than in group B (39.31%). Thus, group A provided better relief in *Sandhigraha*. When the disease aggravated, the vitiated *Vata* could produce *Stambha* leading to an inability of movement. It was improved by inducing *Swedana* because joint activity was regulated by

the presence of *Vata* and *Kapha* at the joint level. *Swedana* increased *Dhatvagni* at the level of the joints, thereby improving the functions of the joints.^[5]

In *Sandhisphutana*, percentage-wise, better relief was found in group A than in group B. *Sandhivata* was localized *Vata Vyadhi*, in which, *Prakupita Vayu* affected the *Sandhi*. This *Sthanasanshraya* was the result of the *Srotoriktata* present at the *Sandhi* and *Swedana Karma* removed the *Srotoriktata* and regulated the *Vata Dosha* and resulting *Shamana* of the *Sandhisphutana*.

The present study showed that both the groups provided statistically highly significant relief ($P < 0.001$) in the symptom of *Akunchana Prasaranajanya Vedana*, but percentage-wise better relief was observed in Group A (60.82%) in comparison to Group B (44.44%). Hence, Group A provided more relief in the symptom of *Akunchana Prasaranajanya Vedana*. *Charaka* referred to this symptom as painful *Prasarana-Akunchana Pravritti*.^[6] However, this symptom might not be seen in the early stages. When the disease aggravated, the vitiated *Vata* could produce *Stambha*, when there was inability of movement because pain was produced mainly by the *Prakupita Vata*. *Swedana* cured the *Prakupita Vata* and regulated joint activity by the increased *Dhatvagni* level.

On examination of the knee joint it was found that there was 17.37% improvement in the knee joint flexion in Group A, whereas, 7.87% improvement in knee joint flexion in group B. Both the groups were found to be statistically highly significant ($P < 0.001$). Here, percentage-wise group A was higher than group B. Movement was the unique feature of *Vata* and in *Sandhigata Vata*; movement was obstructed because of the *Sanga* type of *Srotodushti*. This gave rise to *Stambha*. Also the increased *Sheeta Guna* of *Vata* was responsible for *Stambha*. *Swedana Karma* relieved *Stambha*, *Gaurava*, *Sheetata* and induced sweating.^[7]

On examining of the walking time, it was found that patients of group A reported 27.36% improvement, while patients of group B reported 10.91% improvement. Both the groups were found to be statistically highly significant ($P < 0.001$). However, percentage-wise relief was found to be better in group A than in group B. The knee was the chief weight-bearing joint and was mainly affected in the patients of *Sandhivata*. On account of pain, the patients had difficulty in walking. As the pain reduced, difficulty in walking also reduced. Therefore, for the assessment of this test, the patients were asked to walk a particular distance and time taken for this was noted before and after treatment. Pain was mainly produced by *Vata* and *Swedana* was the best treatment for the *Shamana* of *Vata*. Hence, better improvement was observed in group A.

The effect on the Climbing Stair Test showed that percentage-wise better relief was observed in Group A than Group B. During the climbing of stairs, pain occurred due to *Vata Prakopa*. *Acharya Charaka* has mentioned that *Swedana* therapy was the best treatment for vitiated *Vata*- and *Kapha*-dominant disorders. *Sandhivata* was a *Vata Pradhana* disorder. Therefore, it was clear that group A therapy provided better improvement in the climbing stair test.

In group A, recurrence was obtained in 26.00% of the patients and in group B recurrence was obtained in 33.33% patients, in the follow-up period, that is, one month after completion of therapy. Here, in the present study, if the duration of the therapy had been longer then the recurrence rate would have been lower.

Probable mode of action of Patra Pinda Sweda

In Nirgundi Patra pinda sweda, Nirgundi and Tila taila were used. Nirgundi had Kapha-Vata Shamaka, Rasayana, analgesic and anti-inflammatory properties. Tila Taila had Snehana, Sandhaniya, Rasayana, and other properties. Before performing Patra pinda sweda locally abhyang was done. Abhyanga karma was Snehana, Kledakara, Jarahara,^[8] Paushtika, and Kapha-Vata nirodhana. Sneha was used for abhyang, which reached Mamsa, Meda, Asthi, Majja and so on. Dhatu provided nourishment to them. Massage gave strength to the muscles; relaxed the stiff muscles, and increased the blood flow and metabolism.

After Abhyanga Patra pinda sweda was applied to the affected part of the body, which was Sandhichestakara, Srotosuddhikara, Agnideepaka, and Kapha-Vatanirodhana, it decreased the Stambha. It released pain, relaxed the muscles, activated the local metabolic process, increased local blood flow, and thus increased the absorption of Sneha through the skin. After administration of Swedana, it might produce a hypoanalgesic effect by diverted stimuli. In the Sandhivata Sanga type of Srotodusti is present and by doing Swedana this Sanga is relived and shaman of Sandhivata.

Probable mode of action of Ashwagandhadi Guggulu Yoga

Ashwagandhadi Guggulu Yoga is a polyherbal formulation. The contents of Ashwagandhadi Guggulu Yoga are Ashwagandha, Rasna, Chopachini, Pippalimula, Shuddha Kupilu, Nirgundi, Shallaki and Guggulu. Most of the drugs of this yoga have Ushna Veerya, Vata-Kaphashamaka, Vedanasthapana, Shothahara, Deepana, Anulomana, Balya and Sandhaniya properties. Its pharmacological activities include anti-inflammatory, analgesic, anti-oxidant, immunostimulant, and so on. By these properties this drug is beneficial for the Shamana of Sandhivata.

Conclusion

Sandhigata Vata is one of the Vatavyadhi described in all the

Samhita and Sangraha Granthas. Acharya Charaka was the first to describe the disease separately with the name of 'Sandhigata Anila' under the chapter of Vata Vyadhies. There is no direct reference regarding Nidana and Samprapti of Sandhivata. The maximum number of patients belonged to the 56-60 year age group. A maximum number of patients had 0-1 year chronicity. A majority of patients, that is, 63.79% were female. A majority of the patients, that is, 58.11% had menopause. A statistically significant result was found in both the groups, but on the basis of percentage and relief in signs and symptoms, it was obvious that the overall effect on the patients in Group A was better in comparison to Group B. No significant change in the laboratory investigation was observed in both groups after treatment. The X-ray finding of degenerative changes remained unchanged. The results would have been better if the therapy had continued for a longer duration. Along with this, if exercises were added to the treatment, it could help in improving the joint function.

References

1. API Textbook of Medicine, 19/ 5, edited by Siddharth N. Shah, ed. 7th published by The Association of Physicians of India. 2003. p. 1151.
2. Oxford handbook of Clinical medicine, Murray longmore, Ian B. Wilkinson, Supral Rajagopalan, ed. 6th, published by Oxford university press, United States, 2004. p. 416.
3. Charaka, Charaka Samhita, Chikitsasthana 28, Vatavyadhi chikitsa/82, Revised by Charaka and Dridha bala with Hindi commentary by R.D. Shashtri, edited by Kashinath Shastri, published by chaukhambha Sanskrit series, Varanasi, ed. 4th 1976. p. 792,
4. Sushruta, Sushruta Samhita, Vatavyadhichikitsa, Chikitsasthana 4/8, edited by Bhaskar Govinda ghanekar published by Motilal Banarasis publications, New delhi ed. 5th 1997. p. 403.
5. Ibidem, Sushruta Samhita Chikitsasthana, Swedaavacharniya chikitsitam, 32 / 22, p. 513.
6. Charaka, Charaka Samhita, Chikitsasthana 28, Vatavyadhi chikitsa, 28/372-74, Revised by Charaka and Dridha bala with Hindi commentary by R.D. Shashtri, edited by Kashinath Shastri, published by chaukhambha Sanskrit series, Varanasi, ed. 4th 1976. p. 783.
7. Charaka, Charaka Samhita, Sutra sthana 28, Langhana Brimhaniya Adhyaya, 22/11, Revised by Charaka and Dridha bala with Hindi commentary by R.D. Shashtri, edited by Kashinath Shastri, published by chaukhambha Sanskrit series, Varanasi, ed. 4th 1976. p. 424.
8. Vagbhata, Ashtanga Hridaya, Sutrasthana, Dinacharya Adhyay 2/8, edited by Profesor Dilip Pandya, published by Saraswati Pustak Bhandar, Ahmedabad ed. 1st, 1992. p. 49.

हिन्दी सारांश

संधिगतवात में निर्गुण्डी पत्रपिण्ड स्वेद एवं अश्वगन्धादि गुग्गुलू का प्रयोगात्मक विश्लेषण

अल्पेश जोशी, चार्मी एस. मेहता, ए. आर. दवे, वी. डी. शुक्ला

संधिगतवात वृद्धावस्था में होनेवाली सामान्य बीमारी है। इस अन्वेषण में ११६ रोगियों को देखा गया जिनमें से १०१ रोगियों ने ४५ दिन तक पूरी दवाई ली। रोगियों को दो वर्गों में विभाजित किया गया। वर्ग अ- संधिगतवात के ५० रोगियों को निर्गुण्डी पत्रपिण्डस्वेद २१ दिन तक दिया गया और अश्वगन्धादि गुग्गुलू योग ३ ग्राम प्रतिदिन ४५ दिन तक दिया गया। वर्ग ब-इसमें संधिगतवात के ५१ रोगियों को सिर्फ अश्वगन्धादी गुग्गुलू योग ३ ग्राम प्रतिदिन ४५ दिन तक दिया गया। इन रोगियों के लिए विशेष परीक्षण पत्र तैयार किया गया था। दोनों वर्गों के रोगियों में अच्छा फायदा मिला परन्तु वर्ग अ का परिणाम वर्ग ब के रोगियों से अधिक अच्छा मिला।