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# CLINICAL EFFICACY OF CHURNA PINDA SWEDA AND AMRITA GUGGULU IN THE MANAGEMENT OF DEGENERATIVE ARTHRITIS

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#### ABSTRACT

Degenerative arthritis is a term synonymous with osteoarthritis, a chronic disorder that damages the cartilage and tissues surrounding a joint. It is one of the Vatavyadhi and can be compared with sandhi Vata (Dhatukshaya janya). I have selected a total of 50 patients for clinical trial of churna pinda sweda and Amrita Guggulu on Degenerative arthritis in the Satyananda yoga and Ayurveda Research Institute Motihari. The patients have been randomly divided into two therapeutic groups. Group A and Group B. Group A - 25 patients were applied Churna Pinda sweda for 21 days with a two- day interval after every week along with administration of Amrita Guggulu 2 tablets (500mg) thrice a day for 60 days with lukewarm water. Group B. The 25 patients in this group were administered only Amrita Guggulu 2 tablets (500mg) thrice a day for 60 days with lukewarm water. The patients were noted according to the subjective and objective criteria. Paired T test applied to the data for accessing the result. With regard to cardinal symptoms, 95.00%, Sandhishoola 90.00%, Sandhigraha and Akuanchana Prasarananya Vedana, 80.00%, Sandhi 75.00%, Sandhisphutana, and Sparsha Asahyata 50.00%. It was obvious

that the overall effect on the patients in Group A was better in comparison to Group B.

**KEYWORDS:** Degenerative arthritis, osteoarthritis Sandhivatta, swedana karma, Churna Pinda sweda, Amrita Guggulu.

#### INTRODUCTION

Degenerative arthritis is a term synonymous with osteoarthritis, a chronic disorder that damages the cartilage and tissues surrounding a joint. It is sometimes called "degenerative joint disease" or "wear and tear" arthritis. Ayurveda can corelet sandhi Vata(Dhatukshaya janya). Sandhigata vata has been described in the vata Vyadhi chapter in classical texts. Sandhigata vata is a type of vata Vyadhi mainly occurs in vridhavastha due to Dhatu kshaya. Sandhigata vata is a common form of articular disorder. Joint pain is the global problem for patients with almost 70% to 80% of the world population suffering from it.

Degenerative arthritis is managed by NSAIDs, analgesic drugs, physiotherapy, corticosteroids, and finally with the help of surgery. The above medication is costly and causes unwanted effects. Even surgery does not provide complete relief. Maharshi charak has given common principles of Vara Vyadhi chikitsa that is repeated use of snehana and swedana. According to Maharshi sushtuta Snehana, Upanaha, Agni karma, Bandhana, and Mardana are the principles for the treatment of sandhigata vata. Thus, taking these principles into consideration, Abhyanga, swedana, and shamama therapy were selected for the present study.

#### AIMS AND OBJECTIVE

To evaluate the comparative efficacy of churna pinda sweda and Amrita Guggulu in Degenerative Arthritis.

#### MATERIAL AND METHOD

Literary material: A detailed study of Degenerative Arthritis was done along with a study on the drugs selected for the Present study. Various books of Ayurveda specially Chark samhita sutra chapter 4/22, chapter 14/25 charaka chikitsa chapter 28, Sushruta samhita Nidan chapter 1, chikitsa chapter 4, Bhavprakash madhyam khanda VattaRaktadhikar, Modern science and the Internet, related to the subject, were referred.

Drugs - Moringa oleifera (sahijana patra) Ricinus communis (Eranda patra) Calotropis gigantean (Arka patra) Boerhaavia diffusa (Punarnava) etc are the main drugs used in churna Pinda sweda. Guduchi, Triphala, Trikatu, shudha kupilu, vidanga, Dalchini, Nishod and

Guggulu are the main contents of Amrita Guggulu.

Clinical Material - A total of 50 patients fulfilling the Criteria of the disease were selected in the Satyananda yoga and Ayurveda Research Institute Motihari and randomly divided into two therapeutic groups. Group A and Group B.

Group A - In this group 25 patients were registered, out of whom 24 completed the full course of the treatment, while the remaining one left the treatment against medical advice.

Group B - In this group, 25 patients were registered, out of whom 20 completed the full course of the treatment, whereas, the remaining 5 left the treatment against medical advice.

#### **Inclusion criteria**

Patients suffering from Degenerative Arthritis. Age group of 40-70 years.

Patients irrespective of gender cast.

#### **Exclusion criteria**

Patients below 40 Years and above 70 years.

Patients had metabolic disorders like Diabetes, Hypertension.

Other diseases such as Rheumatoid Arthritis, Paralysis, Parkinson's disease. Patients underwent or needed surgical intervention.

Secondary osteoarthritis due to tuberculosis, syphilis, AIDS, leprosy. Pregnant and lactating mother.

# Criteria for Diagnosis

The signs and symptoms of sandhigata vata (Dhatukshaya janya) as described in Ayurveda texts, were selected for the clinical trial of Degenerative Arthritis patients. 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.

Investigation - Routine hematological and biochemical investigations like random blood sugar S cholesterol, S uric Acid was carried out in selected patients to be 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. R.A. Factor was carried out in the patients where it was required for differential diagnosis.

# **Grouping patients**

Group A - In this group patients were given Churna Pinda sweda for 21 days with a two-day interval after every week, along with administration of Amrita Guggulu 2 tablets (500 mg) thrice a day for 60 days with lukewarm water.

Group B. The patients in this group were administered only Amrita Guggulu 2 tablets (500mg) thrice a day for 60 days with lukewarm water.

#### Procedure of Churna Pinda Swedan

Churna Pinda sweda - Churna Pinda Sweda is one among ooshma sweda. It is based on the principles of Sankara sweda (Mixed fomentation) and Tapa sweda (heat application).

# Material required

Suitable powder (Like powder of Moringa communis leaf, Ricinus communis leaf, Boerhaavia diffusa leaf, calotropis gigantea leaf Barley, Black Gram, Horse gram)	500 grams
Lemon	2 pieces
Rock salt	20 grams
Oil for frying powder	50 ml
Cotton cloth (45cm x 45 cm)	4 Pieces
Tags	4
Vessels (for frying leaves and for heating potalis)	2

# Preparation of the Churna pinda pottali

The powder fried in the vessel till it attained a golden-brown colour. It is divided into 4 equal parts and made into potali (Average weight of a standard potali is 250 gm).

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 churna Pinda sweda: First the sultanka oil is smeared on the affected joint, then the therapist massages the affected joint by moving his palm in a circular fashion. Heat is applied to the joint by using this heated churna pinda potali. To begin with the therapist should confirm the heat in the Potali by touching the pack on the dorsum of the dorsum of his

hand. Then the heat is applied to the patient's body for Swedana. For this purpose, churna pinda potali may be momentarily touched on the joint or they may be moved on the joint. In this way, sweda is continued for about an hour.

Criteria for Assessment: The improvement in the patients was assessed mainly based on 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.

# Scoring pattern for signs and Symptoms

Shoola (pain)	Score
No Pain	0
Mild Pain	1
Moderate Pain without difficulty in walking	2
Slight difficulty due to pain	3
Severe difficulty in walking	4

Shotha (swelling)	Score
No Swelling	0
Slight Swelling	1
Moderate Swelling	2
Severe Swelling	3

Sandhigh (stiffness)	Score
No stiffness	0
Mild stiffness	1
Moderate stiffness	2
Severe difficulty due to stiffness	3
Severe Stiffness for more than 10 minutes	4

Sandhisphutana (Crepitus)	Score
No crepitus	0
Palpable crepitus	1
Audible crepitus	2

Sparshasahayta (tenderness)	Score
No tenderness	0
Patients say tenderness	1
Winching of face on touch	2
Patients don't allow to touch the joint	3

Akunchana Prasarananya (Vedana) - Pain during extension and Flexion)	Score
No pain	0
Pain without the winching of face	1
Pain with the winching of face	2

Prevent complete flexion	3
Patients don't allow positive movement	4

The following periodical functional tests were carried out for objective assessment of the improvement of Degenerative disease.

Walking time - The patients were asked to walk 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 joint was measured by using the goniometer, both before and after the treatment.

# Overall effect of therapy

The clinical response may be indicated as complete response, Partial response, and dropout.

- 1. Complete response Where 100% relief has been noted and pathological and biological values have returned to normally.
- 2. Partial response Partial response divided into four groups.
- a Marked relief up to 70% and above.
- b Moderate relief above 50% but below 70%
- c Mild relief more than 20% but below 30% only No response only marginal improved.
- 3. Dropout -where the case has discontinued the treatment before completion.

# **OBSERVATION**

Before and after results of the 50 patients were noted according to the subjective and objective criteria. Paired T test applied to the data for accessing the result. Regarding cardinal symptoms, 95.00 % of the patients had Sandhishoola, 90.00% had Sandhigraha and Akunchana Prasaranajanya Vedana, 80.00 % had Sandhishotha, 75.00 % had Sandhishotha, and 50.00% had Sparsha sahyata. All the patients (90%) were found to have knee joint involvement and only 4.0 % had ankle joint involvement.

# **Results on cardinal symptoms**

In Group A, marked improvement was seen in 16.00% of the patients, while moderate

improvement was seen in 72.00%, whereas mild improvement was found in 08.00% and only 04.00% of the patients had no improvement. However, in group B marked improvement was seen in 00.00%, followed by moderate improvement in 50.00%, and mild improvement in 25.00%; and 25.00% of the patients came under the no improvement category.

Table 1: Overall effect of therapy.

Effect	Gr	oup A	Group B		
	Patients   Percentage   1		<b>Patients</b>	Percentage	
Marked Improvement	4	16	0	0	
Moderate Improvement	18	72	10	50	
Mild Improvement	2	8	5	25	
No Improvement	1	4	5	25	

Table 2: Effect of therapy on Sandhishoola.

Sandhi Shool	No. of Patients	Mean Score		% of Relief
		BT	AT	
Group A	25	2.9	1.1	72.05
Group B	25	2.7	2.5	51.92

Table 3: Effect of therapy on Sandhishotha.

Sandhishotha	No. of Patients	Mean Score		% of Relief
		BT	AT	
Group A	22	2.5	1.0	71.42
Group B	19	2.7	2.2	54.16

Table 4: Effect of therapy on Sandhigraha.

Sandhigraha	No. of Patients	Mean Score		% of Relief
		BT	AT	
Group A	25	2.5	1.2	67.56
Group B	22	2.9	2.5	53.70

Table 5: Effect of therapy on Sandhisphutana.

Sandhisphutana	No. of Patients	Mean Score		% of Relief
		BT	AT	
Group A	20	2.6	1.1	70.27
Group B	15	1.5	1.3	53.57

Table 6: Effect of therapy on Sparshasahyata.

Sparshasahyata	No. of Patients	Mean Score		% of Relief
		BT	AT	
Group A	20	2.5	1.5	62.05
Group B	18	2.7	2.4	52.94

Table 7: Effect of therapy on Akunchana Prasaranajanya Vedana.

Akunchana Prasaranajanya Vedana	No. of Patients	Mean Score		% of Relief
		BT	AT	
Group A	25	4.6	2.4	65.71
Group B	20	3.0	2.4	55.55

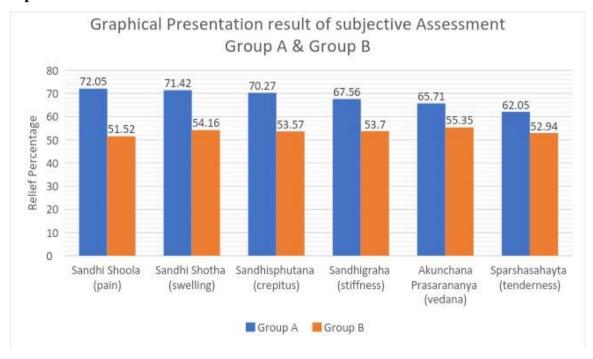
Table 8: Effect of therapy on walking time.

walking time	No. of Patients	Mean Score		% of Relief
		BT	AT	
Group A	25	12.77	10.96	14.77
Group B	25	12.58	11.23	10.75

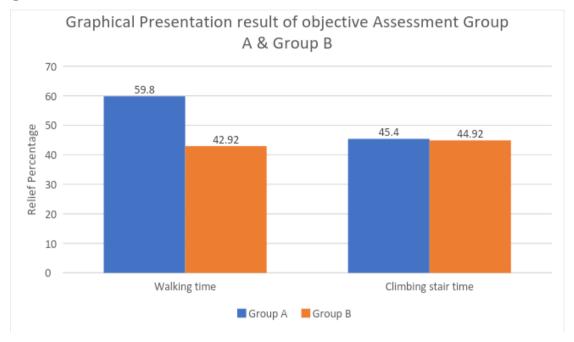
Table 9: Effect of therapy on climbing stair time.

climbing stair time	No. of Patients	Mean Score		% of Relief
		BT	AT	
Group A	25	12.58	11.23	10.73
Group B	20	13.42	12.20	9.09

Graph 1



Graph 2.



#### **DISCUSSION**

The present study reveals that all the patients (90%) were complaining of Sandhishula. Maximum numbers of patients were having complaints of both Sandhigraha and Akunchana Prasaranajanya Vedana, that is, 90% followed by 75% patients who were complaining of Sandhishotha, 50% patients who had Sandhisphutana had Sparshasahyata. All the patients (90%) were having knee joint (Janu Sandhi) involvement and only 50% of the patients had ankle joint (Gulpha joint) involvement. It can be concluded that the Degenerative Arthritis of the knee joint is most common.

Effect of therapy on cardinal symptoms in the symptom of Sandhishula, both the groups provided significant relief but percentage-wise, 72.05% relief was observed in Group A, while in group B it was 51.92%. Thus the best relief was seen in patients of Group A. In Sandhishotha both the groups provided significant relief, but percentage-wise relief of 71.42% was seen in group A and 54.16% in group B, hence, Group A therapy provided better relief in Sandhishotha than Group B therapy. In the present clinical study, significant results were observed in both the groups in the symptoms of Sandhigraha. However, percentagewise more relief was found in group A, that is, 67.56 than in group B 53.70% Thus, group A provided better relief in Sandhigraha. In Sandhisphutana, percentagewise, better relief was found in group A than in group B. The present study showed that both the groups provided significant relief in the symptom of Akunchana Prasaranajanya Vedana, but percentage-wise

better relief was observed in Group A 51.71 in comparison to Group B 55.55%. Hence, Group A provided more relief in the symptom of Akunchana Prasaranajanya Vedana. On examining the walking time, it was found that patients of group A reported 14.77% improvement, while patients of group B reported 10.73% improvement. Both the groups percentage-wise relief was found to be better in group A than in group B. The effect on the Climbing Stair Test showed that percentage-wise better relief was observed in Group A than Group B.

#### **CONCLUSION**

Degenerative arthritis is one of the Vatavyadhi. The maximum number of patients belonged to the 50 - 60-year age group. A majority of patients, that is, 60% were female. Many of the patients, that is, 50% had menopause. A significant result was found in both the groups, but based on 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. 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.

# REFERENCE

- 1. Charak samhita sutra sthana chapter 4/22, chapter 14/22, Chikitsa sthana chapter 28 edited by Brahamananda Tripathi, chaukhabha surbhi prakasana varansi.
- 2. Sushruta samhita Nidana sthana chapter 1 and chikitsa sthana 4, edited by Anandaram Sharma, chaukhamba surbharati prakashan varanasi.
- 3. Bhava Prakash of Bhava Mishra, Madhyam khanda vataraktadhikar, edited by srilala shaligram, Khemraj srikrishna Das Prakasana Bambe.
- 4. Efficacy of Patra Pinda sweda in the management of sandhigata vata w.s.r osteoarthritis by R.Anushree, chavan Dipali et.al published AYUSH DHARA- A International Journal of Research in Ayush and Allied system, November December, 2022; 9(6).
- Clinical effect of Nirgundi Patra pinda sweda and Ashwagandha Guggul yoga in the management of Sandhivata (osteoarthritis) by A. Joshi, charmi s mehta et.al Published in AYU an international quarterly Journal of Research in Ayurveda April – June, 2011; 32(2): 212-217.