

RESEARCH ARTICLE

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# A COMPARATIVE CLINICAL STUDY OF SHUDDHA GUGGULU AND RUJAHARA VATI IN STHOOLA SANDHI SHOOLA

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#### ABSTRACT

Ayurveda the "Science of life" deals with two objectives maintenance of positive health and cure of the disease. Sandhi Shoola is a clinical manifestation seen in many diseases that afflicts the Sandhi. Even though Sandhi Shoola is not proved to be fatal, it cripples the affected patients. In Ayurveda, Acharyas have mentioned Dosha pratyaneeka, Vyadhi pratyaneeka and Lakshanika Chikitsa The last Lakshanika Chikitsa is any way management which is made irrespective of the disease to treat a condition or a symptom of a disease which is annoying the patient. Thus the present study is undertaken to fulfil the Triskandha Ayurveda Lakshanika Chikitsa of Vedana/ Ruja in Sandhi Shoola conditions. Thus in this study an effort is being made to discuss on symptoms and the treatment to be adopted in different Joint pain conditions found in day- to-day practice.

KEYWORDS: Vedana, Sthoola Sandhi Shoola

#### **INTRODUCTION**

Sandhi Shoola is an important clinical manifestation seen in many diseases that afflicts the Sandhi. The diseases of Sandhi are becoming more and more common in these days due to the prevalent habits and life style in the present era. Amavata, Sandhigata Vata, Krostukshirsha, Vatarakta etc., are presenting most troublesome complaints affects the locomotor system in the most productive period of life i.e., between 30-60 years i.e., Sandhi Shoola, hence the management of pain becomes first priority of the physician.

There is no individual who has not suffered from pain, in shoulder, elbow, wrists, hips, knees and ankles or any other part of body, if not today, it will come tomorrow. Pain is the most prominent symptom in people with arthritis<sup>1</sup> and is the most important determinant of disability in patients with osteoarthritis<sup>-2</sup> both environmental and genetic factors may contribute to the development of joint pain. For example, farming contributes to increased frequency of joint pain <sup>3-6</sup> and that being overweight is also associated with increased prevalence of joint pain<sup>7</sup>.

#### **OBJECTIVES**

-To assess the Rujahara prabhava (analgesic effect) of Shuddha Guggulu (standard) in Sthoola Sandhi Shoola

-To assess the Rujahara prabhava (analgesic effect) of Rujahara vati (trial) in Sthoola Sandhi Shoola -To assess the Shophahara prabhava (antiinflammatory) of Shuddha Guggulu (standard) in Sthoola Sandhi Shoola -To assess the Shophahara prabhava (anti-

inflammatory) of Rujahara vati (trial) in Sthoola Sandhi Shoola

-To compare and assess the Rujahara (analgesic effect) and Shophahara prabhava (anti-inflammatory) of Rujahara vati (trail drug) to the Shuddha Guggulu (standard).

### LITERARY REVIEW

The rational combination formulated Rujahara vati with vedanashamaka and shophahara prabhava ingredients are enlisted below with the combination and proportions.

Ing	gredients	Botanical	Parts	Quantity
		Name	used	
1.	Shala <sup>8-15</sup>	Shorea	Twak	1 part
		robusta		
2.	Katphala 16-22	Myrica nagi	Twak	1 part
3.	Shirisha <sup>23-30</sup>	Albizzia lebbeck	Twak	1 part

#### Subjective parameters

4.	Ashoka	Saraca	Twak	1 part
	31-38	indica		

Preparation of the medicine: All the ingredients of the Rujahara vati are well identified and dried in shade. Later all ingredients are powdered to fine and filled in 500 mg capsules for distribution. The same procedure is observed for the Shuddha Guggulu also. Later made capsules are stored in air tight containers.

### **MATERIAL & METHODS**

Present study registers 50 patients, out of 60 approached patients. 50 patients were distributed equally in 2 groups as Group A-25and Group B-25 which are fulfilling the criteria of diagnosis and inclusive criteria of this study.

Patients suffering from Sandhi Shoola were selected from the Post graduate studies and Research centre, Department of Kayachikitsa, OPD and IPD of Shri, D.G.M.A.M.C. & Hospital, Gadag, Karnataka and subjected to clinical trial.

Ruja	Kriya	Sandhi sthiti	Sopha
Grade $0 = Normal$	Grade $0 = Normal$	Grade 0 = Prakruta	Grade 0 = Normal
Grade 1= Alpa ruja	Grade 1= Kriya	Grade 1= Laghavata	Grade 1= Alpa sopha
Grade 2 =	nasha	sandhi sthiti	Grade2=Madhyma
Madhyma ruja	Grade $2 = Manda$	Grade 2 = Prahruta	sopha
Grade 3 = Teevra	kriya	sandhi sthiti	Grade3 = Teevra
ruja	Grade 3 = Madhyma	Grade 3 = Gurutwa	sopha
	kriya	sandhi sthiti	
	Grade 4 = Ati kriya		

#### **Objective parameters**

Sector Parameters	
a) Haemoglobin %	f) Redness grading in VAS 0-100
b) Erythrocytes sedimentation rate 1 <sup>st</sup> hour	g) Swelling in mm
c) Differential count	h) Mobility grading in VAS 0-100
d) Joint pain grading 0 to 10	i) Mc Gill's pain questioner
e) Local temperature in ° F	

Inclusion Criteria:				
a)Patient of either gender aged between 30–70	d)Patient presenting with sthoola sandhi shula.			
yrs were selected				
b)Patient presenting with sthoola sandhi	e)Patient presenting with sthoola sandhi shula &			
shopa	shopa			
c)Other than declared exclusion				
Exclusion criteria:				
a) Known Fracture, ligamentum tear and dislocation cases	e) Known case of osteomyelitis, tumors of bones and joints.			
b) Pregnant woman and lactating mother	f) Associated with trauma			
c) Associated with any other systemic or metabolic disorders	g) Patients on steroid therapy			
d) Patients under gone surgery				
Treatment Schedule:				

GROUP A	GROUP B
Sample size – 25	Sample size – 25
Drug – Shuddha Guggulu	Drug - Rujahara vati
Dose $-2$ Caps of 500mg thrice daily	Dose – 2 Caps of 500mg thrice daily
Duration – After food thrice daily for 20 days	Duration – After food thrice daily for 20 days

**Observation:** During treatment duration patients was asked to come for assessment on every 10 th day.

Follow up: Patients were asked to come for an assessment on every 10 th day

# **OBSERVATIONS & RESULTS**

### Comparative Subjective statistical assessment of group A and B

Parameter	Group	Mean	SD	SE	PSE	t value	P value	Remark
Ruja	А	0.84	0.624	0.124	0.1697	1.649	>0.05	NS
	В	0.56	0.583	0.116				
Kriya	А	0.28	0.541	0.108	0.147	0.544	>0.05	NS
	В	0.2	0.5	0.1				
Sandhi sthiti	А	0.24	0.435	0.0871	0.161	0.248	>0.05	NS
	В	0.2	0.408	0.136				
Shopha	А	0.2	0.408	0.0816	0.132	0.303	>0.05	NS
	В	0.24	0.522	0.104				

#### Comparative Objective statistical assessment of group A and B

Parameter	Group	Mean	SD	SE	PSE	Z value	P value	Remark
Hemoglobin	A	11.016	1.185	0.237	0.353	0.453	>0.05	NS
	В	10.856	1.310	0.262				
ESR	А	9.24	12.82	2.564	2.736	1.315	>0.05	NS
	В	5.64	4.786	0.957				
DC	А	56.6	4.6	0.92	1.6449	1.265	>0.05	NS

Polymorphs								
	В	54.52	6.819	1.363				
DC	А	38.24	5.27	1.054	1.5889	1.082	>0.05	NS
Lymphocytes								
	В	38.96	5.947	1.189				
Joint pain	А	1.8	1.118	0.223	0.309	0.517	>0.05	NS
	В	1.64	1.075	0.215				
Local	А	98.148	0.787	0.1574	0.171	0.023	>0.05	NS
temperature								
	В	98.144	0.348	0.069				
Redness	А	63.6	11.503	2.3	3.234	0.247	>0.05	NS
	В	62.8	11.372	2.274				
Swelling	А	307.96	109.85	21.971	30.147	0.337	>0.05	NS
	В	297.8	103.22	20.644				
Mobility	А	90.0	7.071	1.414	2.271	0.176	>0.05	NS
	В	90.4	8.888	1.777				
McGill's	А	2.6	0.866	0.173	0.246	0.65	>0.05	NS
Questioner								
	В	2.76	0.879	0.175				

### **Overall Assessment of Result after the Treatment**

Sl.no	Result	Group A( Shud	dha Guggulu)	Group B ( Ru	jahara Vati)
		Patients Percentage		Patients	Percentage
1	Complete Remission	18	72	19	76
2	Well responded	6	24	4	16
3	Moderate response	1	4	2	8
4	Not Responded	0	0	0	0

# DISCUSSION

# a) Dosha considerations

In Sandhi Shoola Vyanavata and Sleshakakapha has got a prime role in the manifestation. The type of Vata that invades throughout the body being responsible for all movements is called Vyanavata and Sleshakakapha resides in joints and helps in movements of joints. The Vyanavata and Sleshakakapha get vitiated by the Nidana and gets lodged itself in Sandhi leading to Sandhi Shoola.

The pain transmission to Buddhi via Manas is under the influence of the Vyanavata and thereafter to determine the impulse the Pranavata takes part. The impulse identified express the reaction to impulse is brought back to action through Udanavata with expression verbal and once again the Vyanavata impacts through the functional. The Samanavata action here is transmissions of Agni from jatharagni to the Twak to make perspiration or to make a counter action of producing sweat or inflammatory sign. The action run away from pain producing factors are taken by Apanavata. Thus the involvements of all Vata are justified.

# b) Dhatu considerations

The Asthi Dhatu with its Ashrayashrayi sambandha to the Vata impacts the Sandhi with which it is joined to make a joint structure. The joints are very much needed for locomotion. The nourishment disturbances action to vitiate the Vata and causing the joint pathology. The dushya is either over nourish with the effect of Ama or under nourished under the influence of Agni impairments ultimately cause the Vata vitiation to give rise joint pain.

# c) Agni and Ama considerations

All the diseases are caused due to Agni variations. Sandhi Shoola an age related symptom. As the age advances the Agni of a person disturbs, which can initiate the Ama formation. Here the accumulation of endotoxins in the synovial joint makes the joint pain conditions to develop. Ama causes obstruction to the srotas, by this there will be margavarodha in the channels of sleshmadhara kala and in turn to cause fluid variations in the Sandhi and aggravation of Vata which ultimately produces the Sandhi Shoola.

# d) Kala considerations

Here at the present study of Sandhi Shoola it is very important to study the sleshmadhara kala which has a relation to the Sleshakakapha. The Kapha in the joint as a fluid is embedded by the kala enriches the joint flexibility and assist the Vyanavata by promoting its action necessary. The kala is a saccular and possess the quantity sufficient and fit to the individual joint. Whenever the fluid is increased or decreased it gives the joint immobility and ultimately the cry out of tissue / kala comes out as pain in the joint.

Probable mode of action of Rujahara vati

The Rujahara vati is initially told as a rational combination of Vedana sthapana gana.<sup>39</sup> The pain is elicited by the impulse. The pain producing areas are with inflammation. The cause of the pain is relieved initially said as Nidana parivarjana. Later to it the action of the drug has to start either by local or general. The drug chosen is not a local applicant. The action of the Rujahara vati is a generalized .The Rujahara vati act as vedanasthapana, shothahara, sandhaniya, deepana, pachana. Thus the drugs act over the Vata which is a prime partner of producing pain anywhere in the body here especially at the joint. As the pain is an action of Vata never all Vata hara dravyas are indicated to Vedana. Only a small group of drugs reduce pain. Here the Rujahara vati action is substantiated.

The effects of the Kashaya skandha enumerated are – Kleda visoshana and Medo vishoshana along with Pitta Kapha hara, Guru, Rakta shodhaka, Vrana ropana, Sheeta veerya, Ama sthambhana, grahi, rooksha, twak prasadana and scratches out adhering materials. Thus the effect of Rujahara vati emphasized as acting on the sleshmadhara Kala when it is swollen to give rise pain. It primarily dries the content increased in the Sandhi kala and the Sleshaka kapha is pacified to facilitate the pain relief in the joint.

# Discussion on results

The subjective parameters in group A shows more highly significant than group B whereas the parameter Ruja and Kriya shows more highly significant in group B. The kriya is having more net mean effect in group B with some variation in both the groups. From the analysis the objective parameters, Joint pain, Local temperature, Swelling and Mobility shows more highly significant in group A than group B (at P<0.001).

# CONCLUSION

-Sandhi Shoola is a main symptom in many Vata Vyadhi.

-Sandhi Shoola vis-à-vis Joint pain is most common presenting complaint of clinical medicine. Even though joint pain is not proved to be fatal, it cripples the affected patients.

-In group A (Shuddha Guggulu) maximum numbers of patients are in 50-60 age group and in group B (Rujahara vati) maximum numbers of patients are in 40-50 age group, which is suggestive of influence of Vata Dosha and the symptom joint pain is being age related. The bone and joint intact is lost, pain in the joint exist, thus a fair conclusion is drawn that the Rujahara vati is a pain killer acts as Vata (sosha) and Kapha (Shotha) hara.

-No complications are observed in the study duration.

-Thus it is safely concluded that the Rujahara vati in comparison with the Shuddha Guggulu as standard drug of choice in Ayurveda is a safe, efficacious, economical in any pain conditions pertained to the joint pathology.

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