

CLINICAL EVALUATION OF SHIVAGUGGULU AND SIMHNADGUGGULU IN THE MANAGEMENT OF AMAVATA

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ABSTRACT

Introduction: The science of *ayurveda* includes all that is essential to make a man not only healthy, but also happy. In the present era due to change in life style, diet habits leads to many health problems. One such problem is *amavata*. In *ayurvedic* texts it is included in *vata-vyadhi*. **Materials and Methods:** The trial drug *shiva guggulu*, and *simhnadguggulu* was prepared by self with classical text reference. the therapeutic protocol in the present study includes 28 patients in 2 groups. Study done by using randomized single blind method of trial. In the study both male and female patients withirrespective of age, presenting with different clinical signs and symptoms of *amavata* are taken and treated with trial drug (*shiva guggulu&simhnadguggulu* 3gm bid with luke warm water) for a period of 21 days and condition are recorded every 10 days. **Results:** As a statistical analysis *shiva guggulu* and *simhnadguggulu* are found significant for management of *amavata*. A detail of clinical study and data is presented in paper. **Assessment:** Moderate improvement is seen in the relief of signs and symptoms. **Discussion and conclusion:** clinical study shows *shiva guggulu* is highly significant in *sandhishula*, *sandhishotha* while *simhnadguggulu* is found highly significant in *sandhigraha*
Key words: - *shiva guggulu*, *simhnadguggulu*, *amavata*, *sandhi shula*, *sandhishotha*.

INTRODUCTION

Amavata is one of the dreadful disorders and included under the *vatavyadhis* in *ayurveda*. The annual incidence rate of rheumatoid arthritis is low however the prevalence rate of the same is very high. Of all the rheumatic disorders, rheumatoid arthritis still remains a formidable disease, as it causes severe crippling deformities and functional disabilities¹. The disease can undergo spontaneous remission and it is difficult to forecast the outcome of the disease and it makes the evaluation of new drug is also difficult. If proper attention has not been paid the condition turns to its worse.

The severe pain and crippling deformities with functional abnormalities makes the patient to seek doctor's advice. Even in modern system of medicine the drug therapy for rheumatoid arthritis is empirical and is focused on 3 issues²-

1. Relieving the pain along with control of inflammation,
2. Improving and maintaining the function and
3. Prevention of the deformity.

However none of the medicine available at present can give everlasting benefit thereby permanent remission from the symptoms. The drugs which are avail-

able as on today are only of value in achieving the symptomatic relief. But their use is restricted because of number of adverse effects attached to their usage. It is because of this reason the people are looking towards a safe and effective drug.

Objectives of the study:

- 1] To assess the comparative efficacy of *shivaguggulu* and *simhnadguggulu* in the management of *amavata*.
- 2] To find out a safe, simple, effective and economical method of treating *amavata*.
- 3] To rule out possible adverse effect of study drugs.

Materials and methods: The therapeutic protocol in the present study includes 30 patients in 2 groups; selected from opd/ipd of NIA hospital Jaipur, fulfilling the criteria of diagnosis, with irrespective of their age, sex, and religion etc, using randomized single blind method of trial.

▪ **Inclusion criteria:-**

- 1. Patients having the signs and symptoms of *amavata*.
- 2. Patients with ra factor negative but having the symptoms of *amavata*.

▪ **Exclusion criteria:**

- 1. Patients with complications of ra.
- 2. Patients in late stage of ra.

▪ **Criteria for diagnosis:**

A special proforma was prepared incorporating all the signs and symptoms based on both *ayurvedic* as well as modern descriptions^{3, 4}. All the points in the perspective of *dosha*, *dusya*, *srotasa* and *agni* on *ayurvedic* line were also included in the proforma. A detailed clinical history was taken initially and complete physical examination of each patient was carried out on the basis of proforma. Ra factor test, HB%, ESR, CBC was carried out in all the patients.

▪ **Posology:**

Table 1 showing posology of trial drug:

Group	Drug administered	Dose	Anupana	Time of administration	Duration of treatment
A	Selfmadeshiva guggulu (<i>r.s.s.</i>)	3 gm	Luke warm water	After meal twice a day	21 days
B	Self madesimhnadguggulu (<i>v.s.</i>)	3 gm	Luke warm water	After meal twice a day	21 days

*R.s.s.*⁶- *rasendra sara samghraha* ref.

*V.s.*⁸ - *vangasenasmhita*

- **Follow up study:** During the trial all patients were regularly analyzed and advised to attend O.P.D. after every 10 days

Clinical assessment: Assessment of the treatment was done on the basis of the relief in the clinical signs and symptoms of the disease. Most of the signs and symptoms of the disease described in *ayurvedic* classics are subjective in nature. Hence in order to provide some objectivity to the subjective results and to make easy the sta-

tistical analysis, multidimensional scoring system was adopted for the patients. This symptoms score was calculated before and after the treatment through statistical analysis and percentage of relief was noted to assess the efficacy of therapy. Scoring pattern was adopted to assess the relief in the cardinal symptoms.

▪ **Criteria for assessment of overall effect of therapy**

Data obtained from the parameters of assessment, before & after the therapy was utilized to evaluate the overall effect of therapy.

- Marked improvement 75% to 100% relief
- Moderate improvement 50 to 75% relief
- Mild improvement 25 to 50 % relief
- No improvement < 25% relief

1. Statistical analysis

The information collected on the basis of observation were analyzed by paired “t” test to evaluate the significances at different levels i.e. at 0.05, 0.01 and 0.001 levels. The obtained results were interpreted as follows,

Not significant - $p > 0.10$

Significant - $p < 0.05$

Moderately significant - $p < 0.01$

Highly significant - $p < 0.001$

Results:-

After completion of the therapy of *shiva-guggul* for 21 days, its effect on the clinical

features was observed as presented by table 2. It provides highly significant relief in *sandhishotha* (77%), *sandhi shula* (68%), *gaurava* (60%) and *aangmardh* (45%) [$p < 0.001$], effect was statistically significant in *a-pvedana* (71%), *sandhigraha* (45%), *aruchi* (45%) and *jwara* (100%) [$p < 0.05$]. After completion of the therapy of *simhnadguggul* for 21 days, its effect on the clinical features was observed as presented by table 3. It provides highly significant relief in *sandhigraha* (92%), *aangmarda* (62%), *aruchi* (57%), *sandhishotha* (54%) and *sandhi shula* (52%) [$p < 0.001$], effect was statistically significant in *a-pvedana* (83%), and *jwara* (77%) [$p < 0.05$].

Table 2 showing effect of the group a (*shiva guggulu*) on various subjective parameters of *amavata*

Symptoms	N	Mean		Difference	% of relief	S.d.	S.e.	't'	P
		Bt	At						
<i>Sandhi shula</i>	13	1.92	0.61	1.30	68	0.48	0.13	9.8	<0.001 hs
<i>Sandhishotha</i>	13	0.69	0.15	0.53	77	0.51	0.14	3.7	<0.001 hs
<i>Sandhigraha</i>	13	0.84	0.46	0.38	45	0.50	0.14	2.7	<0.05 s
<i>A-p vedana</i>	13	0.53	0.15	0.38	71	0.50	0.14	2.7	<0.05 s
<i>Aangmarda</i>	13	1.53	0.84	0.69	45	0.48	0.13	5.19	<0.001 hs
<i>Aruchi</i>	13	0.84	0.46	0.38	45	0.50	0.14	2.73	<0.05 s
<i>Trishna</i>	13	0.07	0	0.07	100	0.27	0.07	1	>0.10 ns
<i>Gaurava</i>	13	1.53	0.61	0.92	60	0.64	0.17	5.1	<0.001 hs
<i>Jwara</i>	13	0.38	0	0.38	100	0.50	0.14	2.73	<0.05 s

Table 3 shows effect of group b (*simhnadguggulu*) on various subjective parameters of *amavata*:

Symptoms	N	Mean		Difference	% of relief	S.d.	S.e.	't'	P
		Bt	At						
<i>Sandhi shula</i>	15	2.5	1.2	1.33	52	0.48	0.12	10	<0.001 hs
<i>Sandhishotha</i>	15	0.73	0.33	0.4	54	0.50	0.13	3	<0.001 hs
<i>Sandhigraha</i>	15	0.93	0.06	0.86	92	0.35	0.09	9.5	<0.001 hs
<i>A-p vedana</i>	15	0.4	0.06	0.33	83	0.48	0.12	2.64	<0.05 s
<i>Aangmarda</i>	15	1.8	0.66	1.13	62	0.51	0.13	8.5	<0.001 hs
<i>Aruchi</i>	15	1.26	0.53	0.73	57	0.70	0.18	4	<0.001 hs

Trishna	15	0.13	0	0.13	100	0.35	0.09	1.4	>0.10 ns
Gaurava	15	0.73	0.4	0.33	45	0.72	0.18	1.7	>0.1 ns
Jwara	15	0.6	0.13	0.46	77	0.83	0.21	2.16	<0.05 s

DISCUSSION

Asamavata is due to vitiated *vata* and *kapha*. Main pathology in the disease is *amanirmiti*. As the trial drug (*shiva guggulu* and *simhnadguggulu*) had definite action on vitiated *vata* and *kapha*. Most of the drugs used in this formulation were *katu*, *tikta* in *rasa* and *ushnavirya* which possess the antagonistic properties to that of *ama* and *kapha* which are the chief causative factors in this disease. Due to this *katurasa* and *ushnavirya* leads to increase digestive power which also digests *amarasa*. Because of *tikshna*, *ushna* and *rukshaguna* pacify the vitiated *vata* and *kapha* and do not allow the *amato* stay at the site of pathogenesis and to create *srotorodha*.

Most of the drugs in the *shiva guggulu* are *agnideepaka*, *pachana*, *amanashana*, *yogvahi* and *vatanulomana* property. *tikta rasa* remove adhered *dosh* from the *dushitasrotas*. Due to *srotovivronoti*, *agnideepana* and *pachana* property of *katu rasa* helps in *strotashodhana*.

Group A (*shiva guggulu*): - this group provides highly significant result in *sandhishula*, *sandhishotha*, and *angamarda* symptoms while *sandhigraha*, *a-p vedana*, *aruchi* and *jwara* shows significant results. *Trishna* symptom shows non significant result, as this symptom was found only in 2 patients during trial.

Group B (*simhnadguggulu*): - this group gives highly significant relief in *sandhishula*, *sandhishotha*, *sandhigraha*, *angamarda* and *aruchi*. *A-p vedana* and *jwara* provide significant relief while *trishna* and *gaurava* provide non significant result.

From above data it can be analysed that group provide highly significant relief in

sandhishula and *sandhishotha* as compare to group b while group b provide highly significant relief in *sandhigraha* as that of group a. Both the groups gives non significant result in *trishna*.

As *simhnadguggulu* contain castor oil in large quantity as that of *shiva guggulu* and it acts as purgative that's why it might be releases stiffness in joints by *virechana karma*. So *simhanadguggulu* is more effective in *sandhigraha*.

Shiva guggulu contain *rasnadvatahara* drugs which is deficit in *simhanadguggulu*, so it may acts as *shulahara* in *amavata*. In assessing overall effect of therapy it was seen that –

In **group A (*shiva guggulu*)** 13 patients were treated, out of which, 6 (46.15 %) patients got marked improvement, 5 (38.47 %) patients got cured and 2 patients (15.38) got mild improvement.

In **group B (*simhnadguggulu*)** -out of 15 patients, 6 patients (40 %) got marked improvement, 5 patients (33.33 %) got improved and 4 patients (26.67 %) were cured.

- None of the patient was found unchanged in both the groups.
- The improvement was statistically highly significant in both the groups but

Comparatively better results were observed in group-b (table 5.42), it may be because of comparatively high percentage of *guggulu* and *eranda* oil in *simhnadguggulu* which helps to relieve the *shool*, *shotha* and *sandhigraha*. *Guggulu* is well known anti inflammatory and analgesic drug, also in *ayurvedic* classic it's *srasayana* property was mentioned which helps to overcome the immunologi-

cal derangement induced in ra by boosting once immunity which breaks the pathogenesis of the disease.

CONCLUSION

1. Both the trial drugs are effective in the management of *amavata* but *simhnadguggulu* is more effective than *shiva guggulu*.
2. This preparation did not impart any side effect and the given dose was well tolerated by the patient without any undesirable side effect like nausea, vomiting etc.

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