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"A CLINICAL EVALUTION AND EFFICACY OF AN AYURVEDIC COMPOUND AND LEECH THERAPY IN THE MANAGEMENT OF SHLEEPADA(FILARIASIS)"

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ABSTRACT

Thirty patients of Filariasis symptomatically co-related with Shleepada within the average age group of 43.5 years irrespective of sex were diagnosed and registered for the clinical study with an aim to know the efficacy of herbal compound (Shleepadari Yoga) and to evaluate the effectiveness of leech therapy. All the patients were divided into two groups, viz. group-I and group-II. Group I patients were treated with Shleepadari yoga in a therapeutic dose for a maximum Period of 4 month where the patients of group II were treated with Shleepadari yoga along with Raktamokshana by Jalouka with an interval of 7 days in each sittings depending upon the severity on the cases.To present the study in a scientific manner 14 critarias were made for assessment and stastically evaluated. Finaly favourable results were found to reduce the final symptoms but as a whole the result was significantly effective in 15% of patients. Hence it can be taken as a supportive therapy in shleepada.

Key words: Shleepada; Raktamokshana; Jalouka; Jaloukavacharana; M.F-Microfilaria; Nimba; Khadira; Madhu; Filariasis; Lymphoedema

INTRODUCTION

Human being is struggling for existence, since the world began, which in turn empower him to develop medical care. From the evolution of civilization though medical care was there, but it was first documented in Atharvaveda. Further it is modified and

documented as different branches and specialties. Sushrutha, the father of surgery-his treatise is the only available, complete and compressive Ayurvedic text dealing various surgical ailments including Shleepada and its management. The incidence and prevalence of the disease Shleepada is on the increase, due to several factors, it being and endemic disease. Most of the people in tropical countries are suffering for this disesase. In Ayurvedic classics; there is vivid description of the disease, Shleepada it nidana, poorvaroopa, roopa, upashaya, samprapti and chikitsa.

The line of treatment of shleepada in Ayurveda like Langhana,Swedana, Virechana, Raktamokshana are to diminish the total body fluid swelling. In modern treatment like diuretics causes the loss of body fluid.

It is also known that the important of using leeches in complicated varicose veins etc. The fast acting antico-agulant hirudin derived from leeches is gaining popularity day by day.

The present study is a clinical evaluation and efficacy of an Ayurvedic compound and leech therapy in the management of Shleepada having the hypothesis has remedial.

At last the whole works is summerised and concluded that use of Shleepadariyoga and jaloukavacharana as a conservative approach towards the filariasis / Elephantisis is effective to a greater extent.

OBJECTIVES:-

1.To evaluate the efficacy of Shleepadari Yoga.

2.To know the role of Jaloukavacharana is Shleepada.

3.To prove the efficacy of Shleepadari Yoga internally and Jaloukavacharana as Raktamokshana (Combined therapy).

Material and methods:-

30 number of patients, suffering from Shleepada are selected and collected from OPD Siddharodh charitable hospital and research center, Bidar and District filarial centre, Bidar as per the inclusive criteria. Patients with the history of fever, lymph node enlargement with swelling, presence of antifilarial antibody are selected without any other systemic metabolic and hormonal diseases.

I) Criteria for selection of cases

The criteria for selection of cases are as follows:-

a) Subjective criteria:

- Jwara(Fever) Off and On
- Kandu on the affected part of the body
- Lasika granthi shodha at the time of acute infection or also drug chronic manifestations of the disease.
- Heaviness of the affected part
- Twacha parivartana in the affected part (due to long stasis of lymphs)

b) Objective Criteria

- Mrudu shotha (pitting oedema stage of lymphatic filariasis, partially relived on test and elevation) exclusively due to Shleepada.
- Elevated eosinophill count
- Presence of antifilarial antibody.

II) Criteria for exclusion of cases:-

- Kathina shotha(Non pitting oedema stage of lymphatic filariasis, not relived in rest and elevation)
- Patients suffering from the following disease;Diabetes mellitus, severe hypertension malnutrition, from deficiency, nephritic syndrome, Congestive cardiac failure, cute nephritis, Tuberculosis, (carcinoma) patients having acute attack of Filariasis.

Clinical Approach to Shleepadari Yoga:-

In-group Ist apart from the treatment described above "Shleepadari Yoga" was given orally for patients to assess any difference in progress and relief from the signs and symptoms after additional oral drug.

Dose- one tablets of Ashta masha (800mg) given twice dalily (1g/day)

Anupana-Madhu

Pathy-Gomutra, Laghu ahara

Apathy – Pulses, Meat, Chillies

Clinical approach to Jaloukavacharana

Group IInd the treatment described above only nirvish Jalouka has been applied.

The leech is placed under clean water being treated with mustard paste and turmeric powder.

a) Preparation of patients: The selected site of the lesion of the patients is cleaned with water swale in a definite position i.e. prone position.

b) Application- now the prepared leech is allowed to stick for sucking blood from the identified lesion.

c) Approach- During sucking the leech is covered with wet cotton in order to maintain a favorable condition

suiting to the leech which ultimately enhance the strength of leech to suck.

d) Duration- At least 5-15 minute is allowed to suck the blood, depending upon shape and size of the leech.

e) Technique- In disagreeable condition, minor injury is to be induced at the lesion with a time sterilized needle.

f) Quantity- At a time 8-10 leeches can be applied depending upon suitability (1Leech/3sq) according to the measurement/extent of swelling

g) Approximately-100-150ml of blood is to be sucked each sitting.

h) Sitting duration-Once in a week up four months.

Criteria for assessment

The following criteria had been selected for assessment of the cases in the present study/these parameters were categories. Subjective and objective parameters Clinical assessment of results were done with the help symptomatology as follows

Criteria for assessments:

1)Fever will be assessed as

G0-No fever

G1-Intermittent- means fever which comes for a few hour within 24 hours.

G2-Remittent-means fever which fluctuate within 1F some times touches normal with in 24 hours.

G3-Contineous fever fluctuate 2F but never touches the normal

Table No. 1
Showing the Statistical Analysis of effectiveness of the group I & group II drug to Fever

	Sign & symptom	Mean ± s.d.	D.F.	t-value	P-value	Remarks
Group- I	FEVER	2.7 ± 0.5270 (B.T.)	9			
		2.7 ± 0.3928 (A.T.1)		21.74	>0.001	Significant
		1.7 ± 0.3928 (A.T.2)		13.69	>0.001	Significant
		2.7 ± 0.3928 (A.T.3)		21.74	>0.001	Significant
		2.7 ± 0.3928 (A.T.4)		21.74	>0.001	Significant
Group- II		2.55 ± 0.510 (B.T.)	9	30.83	>0.001	Significant
		2.55 ± 0.340 (A.T.1)		17.05		
		2.00 ± 0.525 (A.T.2)		30.83	>0.001	Significant
		2.55 ± 0.340 (A.T.3)		30.83	>0.001	Significant
		2.55 ± 0.340 (A.T.4)		30.83	>0.001	Significant

S.D. – Standard Deviation, BT – Before treatment, AT- After treatment, df- Degree of freedom, t-test of significance, p-probability

Table No.2
Showing the Statistical Analysis of effectiveness of the group I & II drug to Lymphoedinitis

	Sign & Symptom	Mean ± S.D.	d.f.	t-value	p-value	Remarks
Group-I	Lymphoedinitis	2.7 ± 0.823 (B.T.)	9			
		0.3 ± 0.48 (A.T.1)		1.96	>0.10	Non-Significant
		0.3 ± 0.48 (A.T.2)		1.96	>0.10	Non-Significant
		1.2. ± 0.632 (A.T.3)		6.00	>0.001	Significant
		1.7 ± 0.823 (A.T.4)		6.54	>0.001	Significant
Group-II		2.9 ± 0.718 (B.T.)	19			
		0.8 ± 0.41 (A.T.1)		8.9	>0.001	Significant
		1.25 ± 0.733 (A.T.2)		7.62	>0.001	Significant
		1.95 ± 0.718 (A.T.3)		12.11	>0.001	Significant
		2.45 ± 0.89 (A.T.4)		12.37	>0.001	Significant

S.D. – Standard Deviation, BT – Before treatment, AT- After treatment, df- Degree of freedom, t-test of significance, p-probability.

Table No. 3
Showing the Statistical Analysis of effectiveness of the group I & II drug to Pain

	Sign & Symptom	Mean ± S.D.	d.f.	t-value	p-value	Remarks
Group-I	Pain	2.1 ± 0.316 (B.T.)	9			
		0.1 ± 0.316 (A.T.1)		1.00	> 0.04	Significant
		0.8 ± 0.568 (A.T.2)		4.45	>0.001	Significant
		1.0 ± 0.316 (A.T.3)		10.0	>0.001	Highly Significant
		1.0 ± 0.316 (A.T.4)		10.0	>0.001	Highly Significant
Group-II		2.15± 0.587 (B.T.)	19			
		0.35 ± 0.49 (A.T.1)		3.21	>0.005	Significant
		0.85 ± 0.745 (A.T.2)		5.09	>0.001	Significant
		1.50 ± 0.89 (A.T.3)		7.54	>0.001	Significant
		1.85 ± 0.745 (A.T.4)		11.08	>0.001	Significant

S.D. – Standard Deviation, BT – Before treatment, AT- After treatment, df- Degree of freedom, t-test of significance, p-probability.

Table no-4
Showing the Statistical Analysis of effectiveness of the group I & II drug to Drug to Tenderness

	Sign & Symptom	Mean ± S.D.	d.f.	t-value	p-value	Remarks
Group-I	Tenderness	2.2 ± 0.422 (B.T.)	9			
		0.8 ± 0.422 (A.T.1)		6.01	> 0.001	Significant
		1.0 ± 0 (A.T.2)		Very large	>0.001	Highly Significant
		1.1 ± 0.316 (A.T.3)		Very large	>0.001	Highly Significant
		1.1 ± 0.316 (A.T.4)		Very large	>0.001	Highly Significant
Group-II		2.30± 0.470 (B.T.)	19			
		0.30 ± 0.470 (A.T.1)		2.86	>0.025	Significant
		0.55 ± 0.3907 (A.T.2)		6.32	>0.001	Significant
		0.95 ± 0.887 (A.T.3)		4.80	>0.001	Significant
		0.45 ± 0.686 (A.T.4)		9.48	>0.001	Significant

S.D. – Standard Deviation, BT – Before treatment, AT- After treatment, df- Degree of freedom, t-test of significance, p-probability.

Table No. 5
Showing the Statistical Analysis of effectiveness of the group I & II drug to Drug to Filarial Skin Test

	Sign & Symptom	Mean ± S.D.	d.f.	t-value	p-value	Remarks
Group-I	Filarial Skin Test	1.0 ± 0 (B.T.)	9			Non-significant
		0 ± 0 (A.T.1)				
		0 ± 0 (A.T.2)				
		0 ± 0 (A.T.3)				
		0 ± 0 (A.T.4)				
Group-II		1.0 ± 0 (B.T.)	9			
		0 ± 0 (A.T.1)		0	0	
		0.05 ± 0.223 (A.T.2)		1.0	>0.04	Significant
		0.10 ± 0.316 (A.T.3)		1.43	>0.02	Significant
		0.25 ± 0.500 (A.T.4)		2.23	>0.05	Significant

S.D. – Standard Deviation, BT – Before treatment, AT- After treatment, df- Degree of freedom, t-test of significance, p-probability.

Table No. 6
CLINICAL ASSESSMENT OF RESULT

CLINICAL ASSESSMENT	GR-1 N=10				GR-2 N=20			
	AT(1)	AT(2)	AT(3)	AT(4)	AT(1)	AT(2)	AT(3)	AT(4)
Cured	0	0	0	0	0		2(10%)	3(15%)
Max. improved	0	0	0	0	0	2(10%)	10(50%)	16(80%)
Mod improved	0	0	1(10%)	1(10%)	0	15(75%)	8(40%)	1(5%)
Mild improved	8(80%)	7(70%)	9(90%)	9(90%)	19(95%)	3(15%)	0	0
No improved	2(20%)	3(30%)	0	0	1(5%)		0	0

AT – After Treatment N – No. of Patients

DISCUSSION

The study entitled a clinical evalution and efficacy of Ayurvedic compound and leech therapy in the management of Shleepada, was undertaken with an aim to evaluate clinically the effect of shleepadari yoga and leech application in the treatment of Shleepada.

In course of present clinical study it is observed that the maximum numbers of patients i.e.67% were within the age group of 31-60 years in which 50% were male and 50% were female. The incidence was gradually less below 30 years and above 60 years, which emphasizes the diseases, is more prevalence within the adult age group irrespective sex. Regarding the incidence the textual reference indicates non significant distribution in age and sex,where as our study differs due to the randomized selection of patients and geographical distribution concerned to the area of study like Bidar.

Observation made from the incidence of social status that 50% of sufferings are from lower social status. This is because of their living style in unhygienic area and slum area. Almost all patients are having gradual

onset and only a single patient with the history of sudden onset. This indicates the disease manifests in a gradual manner and the severity of sign depends upon the duration the duration of history. In the present study the average history of duration was 10.5 years, out of 30 patients 26(86.66%) were having –ve result, in previous treatment and only four patients were having improved result indicates less responsiveness of treatment option. While taking the history 100% cases were reported with similar attack before. So all the above data agrees with the textual references.

Pain, swelling, tenderness, temperature of varying degree and fever of different pattern, being the most important sign and symptom. The study shows swelling in the limb tenderness and temperature/fever among all the patients were as pain was marked in 97% of patients. Along with some patients were also reported with associated sign and symptoms like nausea, vomiting.

To asses the general condition the heamatological and Filarial skin test was done and changes among total patients marked before,during and after treatment were assessed and observed in differential count. According to cell response, Eosinophil count decreased in 31.25%, of group II and no response was found in Group-I after one month treatment. Which was later changes into 31.25%,50%,72% in group – II and in group-I 10%,100%,100% respectively, after successive four month of treatment which indicates both the treatment was proportionate to the cell response but the proportion of the response was good in group-II because of the combined effect of the drug and management.

It is evident from FST that there was no response in group-I even after the entire treatment (four month). In group II- the percentage of relief after one month of treatment was 0% and after 2 month 5%,after 3 months 25% of relief was reported, which is suggestive of improvement, but some times FST may also be falls negative i.e,why the percentage of cure rate cannot be demanded.

Out of the study the clinical assessment as a whole signify the effectiveness of the treatment of group I and group II that fevourable result was obtained in 70% of cases out of

which 3.333% (1) was reported in group I and 66.66%(20) was reported in group II. In comparison the outcome of effect on the patients group II was more 66.66% contributing 19(63.33%) improve 1(3.33%) moderate improved.

The clinical, pathological findings are statistically analysed an configarated with pair t-test in order to prove this significance in scientific manner, while described the pair t-test in each signed symptom it observed that the effect of shleepadari yoga and Jaloukavacharana is significantly high with a ph-value of >0.001 in the treatment of shleepada only by reducing pain, swelling and temperature and facioliatating the patient comfort.

CONCLUSION

The conclusion has been drawn from the above study and discussion that out of the two treatments the internal administration of Shleepadari yoga is effective to some extent only by reducing the cellular responses and temperature where as along with Jaloukavacharana is effective by reducing the inflammatory condition, hyperplasia, fibrosis and some of the cardinal sign and symptoms. Hence the hypothesis behind the study found to be correct. Since the clinical study is conducted on limited number of patients, it may not be claimed as final, more detailed study may be conducted in this regard to prove its efficacy.

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