A COMPARATIVE CLINICAL STUDY OF LANGALI VATI AND SAMASHARKARA GUGGUL IN THE MANAGEMENT OF VATARAKTA W.S.R. TO GOUTY ARTHRITIS

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ABSTRACT:

Vataraktha is a disease in which both Vata and Raktha are vitiated by their own causative factors. It is one of the common diseases due to the present life style which occurs commonly in various socio economic classes of people. A comparative clinical study on Langali Vati and Samasharkara Guggul had taken to assess the effect of both the drugs in managing Vataraktha. The comparative effect in managing the same disease is assessed, two groups were made and the results obtained in both the individual groups were compared. The study design selected for the present study was prospective comparative clinical trial. The sample size for the present study was 40 patients suffering from Vatarakta as per the selection criteria. Patients were randomly distributed to both the groups of equal size. Group A - 20 patients received Langali Vati. Group B – 20 patients received Samasharkara Guggul. Average percentage of improvement of Group A is 61.15% which is greater than Average percentage of improvement of Group B- 50.40%. Hence we conclude that effect observed in Group A Langali Vati is more than Group B Samasharkara Guggul in the management of Vatarakta. For comparison between Group A and Group B, Un paired t test is used. P-Values for parameters Sandhi Graha, Sandhi Shotha, Interval of manifestation of symptoms and Daaha are more than 0.05 indicate that there is no significant difference between Group A and Group B in the management of Vatarakta. Where

as in the parameters Sandhi shoola, Vaivarnya, Sparsha Asahatva and Uric Acid Level, P values are less than 0.05 which indicate that there is significant difference in the mean effect of both groups in the management of Vatarakta.

Key words; Vatharakta, Langali Vati, Samasharkara Guggul

INTRODUCTION:

The word Vatarakta is made of two words Vata & Rakta. "Vata Dushtam Raktam Yatra Roga Visheshah" the disease characterized by the abnormality of Raktadhatu due to morbidity of Vata dosa is called as Vatashonita. The disorders produced by the conjugation of vitiated Vata and Rakta generate multiple health ailments which in greater term are referred to as Vatashonita. It is better correlated with "Gout" in the modern medical science. Vatashonita is a metabolic disorder where in pain is predominant symptom, The etiopathogenesis of an illness by way of Avarana is unique to the Vatavyadhi. It is a well observed fact that many diseases are understood and recognized by the site of origin and affliction. The basis of its Samprapti includes the Margavarana of Vayu by Rakta.[1] In addition to this, Vatashonita is also produced by the Margavarana of Vayu by Kapha and Medas.[2] In the parlance of conventional medicine, Vatashonita can be correlated with gout on the basis of similarity in sign and symptoms. Gout is a multi-factorial disorder characterized by hyperuricemia, deposition of uric acid crystals in and around joints as well as in soft tissue. [3]

In modern science Gout is metabolic disorder having the incidence of 0.2 to 2.5 per 1000, with an overall prevalence of 2-26 per 1000.[4] As it is a disease involving Avarana, different preparations with drugs having Srotho sudhikaraka (drugs which cleanses the channels) and disease eliminating (vyadhi hara rasayana) properties like Langali Vati which is mentioned in Bhavaprakasha madhya Khanda in Vatarakta Chikitsa, the ingredient of formulation are Langali Kanda, Triphala, Loha Bhasma, Trikatu, Guggul, Draksha, Matulunga act as a Deepana and Srotoshodhana.[5] Also classical preparation Samasharkara Guggulu [6] from Bhavaprakash Madhyama Khanda shows significant effect on Vata Rakta. Samasharkara Guggulu Contains Yavasuka Kshara, Suradaru, Saindhava, Musta, Truti, Vacha, Yavanika, Trikatu, Dipyaka, Nisha, Triphala, Jiraka, Shahajira, Vidanga, Chitraka, Guggul, Sharkara and Ghee. Hence study to find an easy and cost effective treatment, the present study is planned to evaluate the comparative effect of Langali Vati and Samasharkara Guggulu in Vatarakta.

OBJECTIVES OF STUDY:

● To evaluate the clinical Efficacy of Langali Vati in the management of Vatarakta.

● To evaluate the clinical Efficacy of Samasharkara Guggul in the management of Vatarakta.

● To study the comparative efficacy of Langali Vati & Samasharkara Guggul in the management of Vatarakta.

REVIEW OF LITERATURE:

• The detail review of disease Vatarakta, Nidana, Samprapti, Lakshana and Chikitsa are explained in Charaka Samhita[7] Madhava Nidana,[8] Sushruta Samhita[9] Bhavaprakasha,[10] Chakradatta.[11]

• In modern description of the disease review is explained in all medicine books like Harrison`s Internal Medicine,[12] Davidson's principles and practice of medicine, [13] API Text book of Internal Medicine, [14] the chapter of Gout and Gouty Arthritis.

• The formulation of Langali Vati is explained in Bhavaprakasha madham Khanda in Vatarakta Chikitsa. The ingredients are Langali Kanda, Triphala, Loha Bhasma, Trikatu, Guggul, Draksha, Matulunga.[15]

• Detail description of Samasharkara Guggul is mentioned in Bhavaprakash Madhya Khanda[16] which has deepan pachan properties.

MATERIALS AND METHODS

Study design: A Simple comparative clinical Prospective study and sampling technique is purposive or deliberate.

Sample size and grouping: 40 patients suffering from Vatarakta were selected and divided into 2 groups, 20 patients in each group.

Group A- 20 patients were administered with Langali Vati for 30 days

Group B-20 patients were administered with Samasharkara Guggul for 30 days

Source of Data:

Patient suffering from Vatarakta were selected from Kayachikitsa O.P.D and I.P.D. of R.G.E.S.A.M.C & Hospital Ron after fulfilling the Inclusion and Exclusion criteria.

Selection Criteria:

The cases were selected strictly as per the pre-set inclusion and exclusion criteria.

Inclusion Criteria:

1. Patients having classical symptoms of Vatarakta
2. Patient of either sex
3. patients of age between 30 years to 60 years
4. Vatarakta patients having chronicity less than 1 year history.

Exclusion Criteria:

1. Patient of Vatashonita associated with any systemic disorder which interfere with present study were excluded.

2. Patient of Gout associated with any severe arthritis condition (such as Rheumatoid arthritis) were excluded from study.

Criteria for diagnosis:

Diagnosis was established by clinical examination of signs and Symptoms of Vatarakta as follows:

- o   Sandhi soola
- o   Sandhi Graha
- o   Sandhi Sotha
- o   Vaivarnya
- o   Sparsha asahatva
- o   Daha

Investigations:

For Diagnostic purpose

- CBC.
- ESR
- Urine Routine examination (urine Micro / Macroscopy).
- Specific Investigation-Serum uric Acid

INTERVENTIONS

Subject	Group A (Control Group)	Group B (Trail Group)
Number of patients	20	20
Drug name	Langali Vati	Samasharkara Guggul
Dose and Route of administration	500 mg BD with honey, Oral	1 g BD with Water, Oral
Time	Morning and evening (Adhobhakta)	Morning and evening (Adhobhakta)
Duration	30 days	30 days

Follow up: patients were followed up on 45th day (after 15 days of treatment) to know the recurrence of the disease.

ASSESSMENT OF THE RESULTS:

The subjective and objective parameters of base line data to post medication were compared for assessment of the results. All the result was analysed statistically for 'p' value using paired - t test and Anova

Subjective parameters:

- Sandhi soola

- Sandhi Graha

- Sandhi Sotha

- Vaivarnya

- Sparsha asahatva

- Interval of manifestation of symptoms

- Daha

Objective parameters

- Uric Acid Level

A. Gradation Of Subjective Parameters

Sr, no	Parameters	Grade 0	Grade 1	Grade 2	Grade 3
1	Sandhi soola	No pain	Pain complained but Tolerable	Pain complained, taking analgesic once a day.	Pain complained, Analgesic > once a day
2	Sandhi Graha	0-25% impairment in the range of movement of joints not affecting daily routine work	25-50% impairment in the range of movement of joints not affecting daily routine work	50-75% impairment in the range of movement of joints not affecting daily routine work	More than 75% impairment in the range of movement of joints not affecting daily routine work
3	Sandhi Sotha	No Swelling	Swelling Complained but not apparent	Swelling obvious on 2 joints	Obvious Swelling on >2 joints
4	Vaivarnya	No discoloration of skin	Mild discoloration of skin	Moderate discoloration of skin (shiny overlying skin)	Severe discoloration of skin (coppery discoloration)
5	Sparsha Asahatva	No tenderness	Transient, no approach for its aversion	Frequent, Self-approach for its aversion	Regular, Seeking medical advice
6	Interval of manifestation of symptoms	Occasional	Only in morning	Only at night	Irregular with short intervals
7	Daha	No Burning sensation	Transient, no approach for its aversion	Frequent, Self-approach for its aversion	Regular, Seeking medical advice

B Objective Parameters

Uric Acid Level

5-5.9	Grade 0
6-6.9	Grade 1
7-7.9	Grade 2
>8	Grade 3

RESULTS:

Comparison Between Group A and Group B

PARAMETER	GROUP	Mean	% of Improv.	T-Value	P-Value	Remarks
Sandhi shoola	A	1.25	78.12	3.13	<0.05	**S**
	B	0.5	55.55			
Sandhi Graha	A	1.05	50	1.67	>0.05	**NS**
	B	0.75	35			
Sandhi shotha	A	0.35	63.63	0.56	>0.05	**NS**
	B	0.25	55.55			
Vaivarnya	A	0.8	47.05	2.93	<0.05	**S**
	B	0.35	46.6			
Sparsha Asahatva	A	1.7	62.96	3.94	<0.05	**S**
	B	1.1	42.3			
Interval of manifestation of symptoms	A	0.35	70	0.369	>0.05	**NS**
	B	0.4	88.8			
Daaha	A	0.9	52.94	1.67	>0.05	**NS**
	B	0.55	50			
Uric Acid Level	A	1	64.51	0.324	<0.05	**S**
	B	0.5	29.41			

For comparison between Group A and Group B, Un paired t test is used. From above table we can observe that P-Values for parameters Sandhi Graha, Sandhi Shotha, Interval of manifestation of symptoms and Daaha are more than 0.05 indicate that there is no significant difference between Group A and Group B in the management of Vatarakta. Where as in the parameters Sandhi shoola, Vaivarnya, Sparsha Asahatva

and Uric Acid Level, P values are less than 0.05 which indicate that there is significant difference in the mean effect of both groups in the management of Vatarakta.

Further we can observe that Average percentage of improvement of Group A is 61.15% which is greater than Average percentage of improvement of Group B- 50.40%. Hence we conclude that effect observed in Group A Langali Vati is more than Group B Samasharkara Guggul in the management of Vatarakta.

DISCUSSION:

- **Probable Mode of Action**

In Ayurveda, the explanation about the mode of action of single drug remedy is possible on the basis of Rasa, Guna, Veerya, Vipaka etc. On the other hand, explanation through Rasa, Guna, Veerya, Vipaka, etc. of compound Yoga(which include many drugs with different Rasa, Guna, Verya, Vipaka) is quite difficult. Chakrapani supported to these sentence and he said that only Rishi(versatile scholar) can able to explain about the specific action of the Yogas. With the consideration of this fact, here sincere attempt has been made to explain the probable mode of action of Langali vati and Samasharkara Guggul in Vataraktha.

a. Langali Vati:

The action of *Rasa, Guna, Virya* etc. get neutral- ized among themselves. Therefore, stronger component neutralizes the action of weaker component. Hence, action of particular drug compound is the action 'as a whole and slow in nature'.

Langali Vati contains mainly *Tikta, Madhura, Kashya Rasa, Laghu, Snighda, Tikshan Guna, both Katu and Madhura Vipaka* and also *Ushna Virya*. It cures cracks of the foot, fracture of knee and many other diseases of *Vata* and *Rakta* said to be incurable and also the severe form of *VataRakta*.

It has anti-inflammatory, analgesic and anti rheumatic properties. It is used in auto -immune disorders especially Gouty Arthritis.

ACTION ON *SAMPRAPTI GHATAKA:*

*Dosha***:**

➤ *Tikta, Madhura, katu* and *Kashaya Rasas* contain mainly *Laghu, Snigdha Gunas.*(*Ch. Su.* 26).

➤ *Snigdha Guna* inhibits the *Ruksha Guna* of *Vatadosha* and *Pittadosha*.

➤ *Laghu guna* and *Madhura, Kashaya Rasas* normalize the *Pitta* and *Rakta.*

➤ *Katu Guna* removes the obstruction and di- late the passage and allay *Kapha*. In this way they help in *Sroto-Shodhana*. Thus in this way the compound drug acts on *Dosha* and disintegrates *Dosha Samprapti.*

Dushya:

*Madhura Rasa & Madhura Vipika***:** Nourishour of *Rakta Dhatu.*

*Tikta Rasa***:** Anti-inflammatory, anti-toxic.

*Katu Rasa***:** Removes the toxic elements from the Tissues.

*Srotas***:** *Katu Rasa* and *Laghu, Tikshna Guna* remove the obstruction and dilate the passage and allay *Kapha*. In this way they help in *Sroto Shodhana*. *Madhura Rasa* and *Sheeta Virya* aggravates the vitiated *Vata & rakta*. In this way, *Srotas Sanga* is removed and this acts on symptoms of *Vata Rakta*.

b. Samasharkara Guggul:

It is having Tiktha as pradhana rasa and Sheetha guna. Due to this qualities it helps to relieve Rakthadushti and Vata. Acharya charaka on Suthrasthana Vidhishoniyheeya Adhyaya says that any of the disease which does not subside by guru, snigdha, sheetha and ushna guna independently that disease is known as Rakthaja vikara. Vatharaktha is one of the rakthaja vikara. More over dominant dosha is concerned in it is vata. Here vata and raktha possess different qualities. Raktha having asraya of pitta having snigdha, visra, drava, ushna gunas etc. While vata having opposite qualities like ruksha, seethe etc. To subside Vataraktha the drug should have the qualities to relieve both the factors. Guggul is having these qualities. Tiktha rasa have ability to give knowledge about inclusion of ruksha guna. On other end Guggul is having snigdha guna that helps to subside ruksha guna of vata. Usually tiktha rasa converts into katu vipaka which cause vibandha, but Guggul exceptionally having madhura vipaka which expel pureesha etc. Tiktha rasa subsides raktha & madhura paka subside vata.Tiktha rasa gives meaning about sheetha guna. Ushna veerya subsides vata also.

CONCLUSION:

- Langali Vati (Group A) is having statistically highly significant effect in the management of Vatarakta.

- Samasharkara Guggul (Group B) is having statistically highly significant effect in the management of Vatarakta.

- On comparison, Group A with Langali Vati is found to be statistically better effective than Group B with Samashakara Guggul on the parameters Sandhi Graha, Sandhi Shotha, Interval of manifestation of symptoms and Daaha. Whereas there was no statistically significant difference in the effect found on the parameters Sandhi shoola, Vaivarnya, Sparsha Asahatva and Uric Acid Level.

- Average percentage of improvement of Group A is 61.15% which is greater than Average percentage of improvement of Group B- 50.40%. Hence we conclude that effect observed in Group A Langali Vati is more than Group B Samasharkara Guggul in the management of Vatarakta

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