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CLINICAL EVALUATION OF EFFECT OF KAISHORE GUGGULU ON VATARAKTA W.S.R TO HYPERURECEMIA

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ABSTRACT

Vatarakta is a disease where both *vata* and *rakta* are affected by different aetiological factors. It is characterised by severe pain, tenderness, inflammation and burning sensation in the joints affected. Characteristics of *Vatarakta* mostly resembles to Gout. Gout is a disorder of purine metabolism and occurs when small crystals of uric acid in form of mono-sodium urate precipitate and deposit in joints or surrounding tissues. It occurs due to overproduction or less excretion of uric acid in the body. Under excretion has been found out to be the primary cause of hyperuricemia in almost about 90% of cases, while overproduction is the cause of less than 10%. It is mostly likely to affect the smaller joints, specially the metatarsophalangeal joint of the big toe. In the present clinical study, 20 patients of *Vatarakta* were treated with *Kaishore Guggulu* 500 mg twice a day for 30 days. The therapeutic effect of the treatment was assessed on both sign and symptoms and laboratory investigations. Among them 8 patients showed marked relief (40%), 7 patients showed moderate relief (35%), 3 patients showed complete relief (15%) and 2 patients showed mild relief (10%). *Kaishore Guggulu* showed good effect in the sign and symptoms of *vatarakta* and there was significant relief in serum uric acid.

KEYWORDS: Vatarakta, Kaishore Guggulu, Gout, Hyperuricemia, Vata, Rakta.

INTRODUCTION

Vatarakta is caused by Aharaj & Viharaj nidana sevana i.e. Vataprakopak hetu & Rakta prakopak hetu. Prakopita Vata leads to Rakta dusthi and moves all over the body and sthanasamshraya occur at Padangustha sandhi due to its Vyadhiprabhava. This is told as Anyonya avarana by Chakrapani.^[1]

Hence *Vatarakta* is considered as *Avaranjanya vatavyadhi*. Due to properties of *Sukshmatva* and *Saratwa* of *vayu*, *Dravatwa* and *Saratwa* of *Rakta* they spread all over the body. The spreading is facilitated by *Vyana Vayu*. The doshas get lodged in *sandhies*. The main and first site of manifestation is *pada mula* (1st metatarsophallangeal joint) and then *hasta* and *pada* and from there onwards spread upwards. The process of spreading of manifestations can be understood by the similar nature to that of rat poison.^[2] (S.Ni 1/43-44; M.N 23/4).

Gout is a disease hallmarked by excess level of uric acid (hyperurecaemia) > 7mg/dl in the blood plasma and surrounding tissue.^[3] Uric acid is derived from exogenous sources, especially cellular proteins foods

such as liver, sweetbread, kidneys, fish roe; and from endogenous sources of which the most important is nucleic acid.^[4] Most of uric acid and urates passes through the glomerulus where it is filtered and is completely reabsorbed by the proximal tubules-a mechanism which would serve to protect the renal tract from carrying fluid containing insoluble urate and permitting uricase to operate in the liver. However, excretion of urate in man takes place in the distal tubule by a process of active secretion and is usually sufficient to maintain the plasma level below the critical concentration of 0.4mmol/1 (7 mg/dl).^[5] Uric acid is purine metabolic disorder.

Kaishore guggulu is classically indicated in *vatarakta* (*sharndhara/madhyam khanda*/7/70-81). It pacifies the *vata* & *rakta dosha* specifically. The present study is focused on the evaluation of the effect of *kaishore guggulu* on *vatarakta* in reference of hyperurecemia.

MATERIAL METHOD PLAN OF STUDY

(A) SELECTION OF PATIENTS - Patient having symptoms regarding *vatarakta* were subjected to

laboratory investigation and the patients found with raised uric acid level were selected for the study. Total 20 patients were selected from the O.P.D. / I.P.D. of Hospital of Gurukul Campus of Uttrakhand Ayurved University, Haridwar. The details of patients were recorded with the help of special performa prepared for this purpose.

(B) SELECTION OF DRUG

1. Kaishore Guggulu

- (C) TYPE OF STUDY Single blind study
- (D) DURATION OF STUDY 30 days

(E) DRUG TRIAL SCHEDULE

Kaishore Guggulu (shrn/madym/7/70-81)

Dosage – 2 Tab B.D. (each tab of 250 mg) after meal with water

Duration - 30 days.

Collection of drug- Kaishore guggulu of Shree Dhootpapeshwar Limited. was taken for present study.

(F) ASSESSMENT & FOLLOW UP

The assessments of the patients were done before and after the complete course of treatment. Follow-up was done for 15 days after completion of treatment.

INCLUSION CRITERIA

- 1. Increased serum uric acid level more than 7mg/dl in male, more than 6mg/dl in female
- 2. Age group between 20-70 years.
- 3. Patients having clinical symptoms of vatarakta.

EXCLUSION CRITERIA

- 1. Atisthula and Atikrisha patients.
- 2. Patients with long standing use of corticosteroids.
- 3. Patients with severe toxicity.

- 4. Patients having serious systemic disorders (like chronic heart diseases, chronic renal disorders).
- Patients with autoimmune diseases. 5.
- Pregnant female and lactating mother 6.
- 7. Arthritis other than gout.

CRITERIA FOR WITHDRAWAL

- 1. Personal matters
- 2. Aggravation of complaints
- 3. Inter current illness
- 4. Leave against medical advice

CRITERIA FOR ASSESSMENT

Assessment of the effect of treatment was done on the basis of following objective & subjective criteria before & after the treatment schedule.

Subjective Parameters

The changes observed in the sign and symptoms of selected vatarakta symptoms were assessed by adopting suitable scoring method.

Objective Parameters

- **Biochemical Tests-**
- 1. Serum uric acid
- 2. Hb %
- 3. T.L.C 4.
- D.L.C 5. E.S.R

Overall assessment- It was done on following basis; Complete relief (100% relief) Marked relief (≥75-99% relief) Moderate relief (\geq 51-74% relief) Mild relief ($\leq 50\%$ relief)

No relief (0% relief)

OBSERVATION AND RESULT

Table no. (1): Signs and symptoms of vatarakta present in 20 patients.

Sr.No	Symptoms of Vatarakta	No. of Patients	Percentage
_1	Kandu	9	45
2	Daha	9	45
3	Ruka	20	100
4	Akunchan-prasaranvedna	18	90
5	Sandhishotha	14	70
6	Stabdhta	18	90
7	Supti	11	55
8	Sparshasahatwa	5	25
9	Mandloutpatti	0	0
10	Shyava-raktatwak	5	25
11	Kathinya	6	30
12	Paka	0	0
13	Guruta	13	65
14	Bhed	19	95

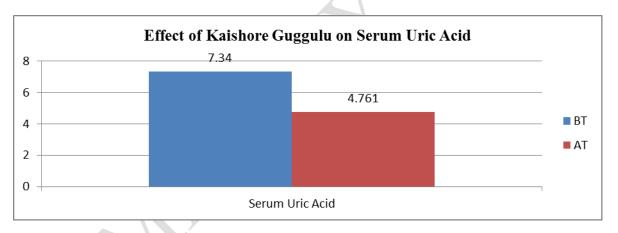
Sr. No	Symptoms of Vatarakta	(% Relief)
1	Kandu	72.72
2	Daha	66.66
3	Ruka	68.88
4	Akunchanprasanran vedana	72.22
5	Sandhisotha	90.47
6	Sthabdhta	77.41
7	Supti	69.23
8	Sparshasahatwa	57.14
9	Mandloutpatti	
10	Shyavarakta twak	57.14
11	Kathinya	42.85
12	Paka	
13	Guruta	86.66
14	Bhed	66.66

 Table No. (2): Percent relief in sign & symptoms of vatarakta in 20 patients.

Among 20 patients, 3 patients (15%) showed complete relief, 8 patients (40%) showed marked relief, 7 patients (35%) showed moderate relief, mild relief (\leq 50% relief) was seen in 2 patients (10%).

Effect on serum Uric Acid: *Kaishore Guggulu* exhibited extremely significant result (P< 0.0001) on serum uric acid level. There was very significant result

found in Hb%. Rest objective parameters were found non-significant. It shows that *Kaishore Guggulu* has a good impact to improve the serum uric acid values. The average value of serum uric acid of 20 patients was 7.34 which were reduced after treatment to 4.761. There was 35.13% reduction observed in serum uric acid after treatment.



DISCUSSION

Vatarakta is a disease where both vata and rakta are different aetiological factors. It is affected by characterised by severe pain, tenderness, inflammation and burning sensation in the joints affected. Characteristics of Vatarakta mostly resembles to Gout. Gout is a disorder of purine metabolism and occurs when small crystals of uric acid in form of mono-sodium urate precipitate and deposit in joints or surrounding tissues. It occurs due to overproduction or less excretion of uric acid in the body. *Kaishore Guggulu* is a drug of choice in *vatarakta*.^[6] It corrects the purine metabolism and checks on uric acid production. It also improves the elimination process of uric acid through urine. Anti inflammatory properties of Guggulu, Guduchi, Sunthi and Trivrit relieves in inflammation induced by crystals to synovial membrane and adjacent tissues. Amlaki and Sunthi acts as analgesic relieving in ruka (pain), bhed (breaking pain). Haritaki and Amlaki have adaptogenic property

reducing acute attacks in gout patients. *Danti* and *Pippali* have immunomodulator property, hence reducing symptoms of *vatarakta*.

CONCLUSION

Kaishore guggulu is cost effective, safe and effective medicine for *vatarakta*. It has got very good results on *vatarakta lakshana* and is effective in lowering the serum uric acid level.

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