

**STUDY THE EFFECT OF NAVAKARSHIKKWATHA GHANA VATI IN
THE MANAGEMENT OF VATARAKTA.****Dr Kedarkulkarni, Dr Medhajoshi and Dr.Vipul Shah**

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India.**INTRODUCTION**

In the era of globalization, life became very easier and comfortable for some people. And due to the era of rat race life became very faster for people. So they couldn't attain the daily activities properly. This changed lifestyle definitely affects the health of the people. Ayurveda is a life science, based on firm principles, which can never be challenged. But violating these principles gives rise to various diseases. With the march of time, most of dietary habits, social structure, life style, and environment have been changing. Due to pattern of daily routine the person is being enforced to undergo 'Hetu-Sevanam'. Occurrence of Vatarakata on large scale is one of the outcomes of this modification. It is commonest among acute as well as

chronic inflammatory joint disease. In which joint become painful, swollen and stiff. It is the disease if not treated properly increases the incidence of disabled or crippled persons, leading to loss of man power. It is debilitating disease in view of its chronicity and complications. Ayurveda has given Dinacharya&Rutucharya, which should be followed by every individual. But due to today's changed life style, it is not possible to follow the above. Things like night shifts, disturbed circadian rhythm, improper diet, fast food, excessive traveling leads to dushti of Vatadosha&Raktadhatu. Thesedushtadoshas - dhatussammurchana leads to disease like VATARAKTA. Considering the clinical presentation and textual references of the disease it can be easily correlated with 'Gout' explained in modern medicine. Gout is systemic skeletal disease having group of disorders of purine metabolism characterised by recurrent paroxysmal attacks of acute inflammatoryarthritis usually affecting a single peripheral joint further may cause chronic degenerative changes in the affected joint. Today various medications from various pathies are available for treatment of Vatarakta. Definitely allopathic system of medicine has got an important role to play in overcoming agony of pain,

restricted movement and disability caused by the articular diseases, but the use of such medicines comes with tremendous side effects. Hence the management of this disease is merely insufficient in other systems of medicine and patients are continuously looking with a hope towards Ayurveda to overcome this challenge, that's where Ayurvedic treatment has proved its upper hand.

AIM AND OBJECTIVES

AIM

To study the effect of Navakarshik Kwatha Ghana Vati in the management of VATARAKTA.

OBJECTIVES

1. To study vatarakta disease in detail.
2. To study Navakarshik Ghana vati in detail.
3. To study the efficacy of Navakarshik Ghana vati in vatarakta.

REVIEW OF PREVIOUS WORKS DONE

Near about 20 studies have been conducted all over India on *Vata-rakta*. On analysis it is revealed that most of the studies were carried out by considering *Vata-rakta* as gouty arthritis. A few studies have also been performed considering *Vata-rakta* as an ischemic limb disease. Even after the increased prevalence of the disease in the present population, very few research studies have been conducted in this regard, which mainly deal with the outcome of the shodhan properties are really promising.

MATERIAL AND METHODS

Drug review-Navakarshik Kwatha – bhaishajyaratnavali -27/14-15

Ingredients- amalaki, haritaki, bibhitak, nimba, manjishthavacha, kutaki, guduchi, daruharidra.

LITERARY REVIEW

References of Vatarakta from Vedas, Brithatrayi and Laughutrayi were studied and compiled.

CLINICAL STUDY

STUDY DESIGN

This was two months, single blind, and randomized, clinical study.

PLACE OF STUDY

All the patients were enrolled in to study from Kaya-Chikitsa OPD.

Administration

Route of administration - Oral

Dose –500mg (B.D)

Bheshajkala–Vyana and Udanakala(after lunch and dinner)

Duration - 2 months

Anupan – Hot Water (koshnajala)

Follow up – After every 15 days.

METHODOLOGY**Inclusion criteria**

- 1) Patient having the textual signs & symptoms of vatarakta.
- 2) Age: 25 to 70 years.
- 3) Patients were selected irrespective of religion, sex & socioeconomic status.

Exclusion Criteria

1. Aamavata, Sandhigatavata, Psoriatic Arthritis.
2. Any other major illness.
3. Patients with chronic diseases.
4. Hypersensitivity reactions to any drug.

CRITERIA FOR ASSESSMENT

A] Clinical assessment was done according to relief of Symptoms & self-assessment, on the basis of gradation & improvement in the classes.

1) Joint Score

The no. of clinically active joints will determined on the basis of tenderness on pressure or painful passive movements.

Score 3 : more than 5 joints.

Score 2 : joints between 3-5.

Score 1 : at least 2joints.

Score 0 : less than 2 joints.

2) Episode of Numbness

Score 3 : above 60 min.

Score 2 : for 30-59 min.

Score 1 : for 0-29 min.

Score 0 : no numbness.

3) Severity of Pain :(by VAS)

Score 3 : severe

Score 2 : moderate

Score 1 : mild

Score 0 : nil 107

4) Tenderness

Score 3 : severe

Score 2 : moderate

Score 1 : mild

Score 0 : nil

Objective parameters**5) Swelling**

Score 3 : Severely present

Score 2 : Markedly present

Score 1 : Slightly present

Score 0 : Absent

Swelling of interphalangeal joints with rings of various diameters to assess increase or decrease in swelling.

Swelling of big joints by measuring their circumference.

6) Local Temperature of affected joints

Score 3 : Severe

Score 2 : Moderate

Score 1 : Mild

Score 0 : If Normal

7) Grip Strength

Measured by recording the pressure that patients can exert by squeezing a partially inflated balloon (at a starting of 20 mm of Hg) of a standard sphygmo-manometer.

Score 3 : poor (below 38 mm of Hg)

Score 2 : moderate (40-140 mm of Hg)

Score 1 : mild (142-280 mm of Hg)

Score 0 : normal (above 282 mm of Hg) 108

8) Functional Score

Score 3 : Unable to do

Score 2 : With the help of other person or device

Score 1 : Able to do with difficulty

Score 0 : Able to do without any difficulty

Overall Score

1 – 8 : Mild Grade I

9 – 16 : Moderate Grade II

17– 24 : Severe Grade III

Relief of Symptom

Patients were assessed during treatment and results were drawn.

Good Results : No any complaints.

Moderate Results : 2 steps down.

Mild Results : 1 steps down.

No Results : No change in complaints.

Lab investigations

Lab investigations were done before treatment & after treatment.

1) Haemogram 2) Uric Acid

3) E. S. R. 4) Urine Routine

Observation

In this study 30 patients were enrolled in this. According to age=Majority of the patients i.e. 43.3% are reported in age group of 40- while in <40 years 26.7 % patients & 30% of patients are above 50 years. Majority of the patients i.e. 43.3% are reported in age group of 40- while

in <40 years 26.7 % patients & 30% of patients are above 50 years. According to sex=Among the 30 patients studied in the series, majority of patients Were males i.e. 60 % & 40 % were female. According to socio economic status= Majority of patients were servicemen 12 i.e. 40 %, while housewives were 26.7% & workers were 4 each i.e. 13.3%, & businessmen were 20 %. 33.3% of patients were of lower economic status, 33.3% of patients were of upper economical status while majorities 14 i.e. 33.3% were of poor status. According to diet= 46.7% patients in the study were vegetarians while 53.3% patients were accustomed to mixed diet. According to dosha=majority of the patients were of pitta vataprakriti they are 12 i.e. 40.0% followed by vata pitta 26.7% then vata kapha were 20.0% then kapha vata were 13.3 %. In the study, According to agni= majority of patients were i.e. 46.7% were Mandagni, while 20% were of Vishamagni then 20% were tikshnagni & 13.3 % were samagni. According to koshtha=Most of the patients i.e. 46.7% were madhyam Koshtha followed by krura Koshtha were 33.3% & 20% were Mrudu Koshtha. In the study the most prevalent hetu was Viruddha Ahara i.e. 60 % followed by Mandagni 33.3%, Viruddha Cheshta 6.7%. According to religion=73.4 % patients i.e. 22 were Hindus & 13.3% were Muslims. And 13.3% were from other religion. According to education- In the study most of the patients were graduate 14, i.e. 46.7%, followed by school pass out were 14, i.e. 46.7%, and HSC pass out were 2, i.e. 6.6%. According to desha= study most of the patients i.e. 66.7% belongs to Sadharandesha, 33.3% to Aanoopdesha. In the study the 53.3% vyadhi were produced in Visargakala as compared to Aadana i.e. 46.7%.

DISCUSSION AND RESULTS

The state of the disease Vatarakta changes after the intervention. Improvement or otherwise was determined by adopted the standard methods of scoring for subjective, objective and special investigations criteria. The stage of inflammatory disorder was assessed both before and after. The intervention to note any change by using the serum uric acid level was also studied before and after the treatment.

The vitiated vata is obstructed in its way by vitiated rakta. The obstructed vata again vitiate the rakta and Vatarakta is produced. The samprapti of vatarakta starts By virtue of sukshma and saraguna of vata and drav and saraguna of rakta, both vata and rakta spread instantaneously throughout the body via srotasas. These (vata and rakta) are obstructed in the joints due to their joints complex structure, and produce various kinds of pain (vedana) according to the associated pittadidoshas. Thus it leads to severe pain in that joint.

This study shows that Navakarshikkwath Ghana vati is statistically highly significant ($p < 0.001$). In duration of numbness navakarshikkwath Ghana vati also showed highly significant improvement which is 55.94%. In case of severity of pain 57.72% improvement was seen after 60 days which is highly significant. ($p < 0.001$). Navakarshikkwath Ghana vati showed almost 58% improvements in sparshasahatva after 60 days.

In above graph in case of shotha at the end of 60 days almost 53% improvement was seen, which is significant ($p < 0.001$). In case of change in local temperature statistically highly significant results were seen i.e. 62.44%, from which we can say Navakarshikkwath Ghana vati is highly significant in change of local temperature. At the end of 60 days 56.5% improvement was seen in grip strength, which is statistically highly significant. ($p < 0.001$)

In case of functional score the trial drug showed 57.14% improvement in functional score, which is statistically significant ($p < 0.001$). In this table Navakarshikkwath Ghana vati shown almost 57% improvement in total score, which proves that trial drug is highly significant in improving of total score.

Total score	N	MEAN	sd	Wilcoxon Signed Ranks Test Z	P	%
Day 0	30	16.73	2.212	4.808	<0.001 Hs	56.96
Day 60	30	7.20	1.901			

OVERALL SCORE

Overall score	O day	60 day
Mild (1-8)	0	20
Moderate (9-16)	18	10
Severe (17-24)	12	0

Effect on lab investigations

Out of 30 pts. Sr. Uric acid levels has been reduced to 40% i.e. (12 out of 30) which is significant, where as 33% pts. shown markedly reduction i.e. (10 out of 30 pts.) and 26% i.e. (8 out of 30) pts shown minimum reduction in present study. Navakarshikkwath Ghana vati might have reduced the Sr. Uric acid level by its anti-inflammatory and as most of the drugs in it are shothaghna, raktprasadak.

Out of 30 pts. ESR levels has been reduced to 38%(12 out of 30pts.),which is significant, where as 34%pts showed markedly reduction i.e.(10 out of 30 pts.),and 28% i.e. (8 out of 30) shown minimum reduction in present study.

No specific changes were seen in haemogram and urine routine throughout the trial.

PHARMACODYNAMIC PROPERTIES OF NAVAKARSHIK KWATH GHANA VATI

we can infer Pharmacodynamic properties of combined drug Navakarshikkwatha Ghana as follows –

Rasa –Tikta, katu

Vipaka – Katu

Virya – Ushna,

Guna–Laghu,Ruksha

Karma-tridoshaghna, shothahara, vedanahara, dahaprashaman, raktshodhaka, vranaropaka.

Being laghuguna, katurasa, ushnaveerya it does best amapachana,Shothahara(anti-inflammatory), Anulomana,Shoolahara (analgesic), and tridoshaghna, dahaprashaman, raktshodhaka.

By its above properties it decreases vitiation of vata, and rakta, so helpful in sampraptibhanga in vatarakta and reduces swelling and pain in vatarakta. In vataraktavibandha (constipation) is one of the symptom that decreases (reveals) by anulomana property.

Statistical test used-Wilcoxon Signed ranks test and Z Test.

CONCLUSION

After analyzing all the observations of raw data we came to the conclusion that navakarshikkwatha Ghana vati is definitely effective on vatarakta.This trial provided highly relief in local temperature (62%), and (58%) relief was seen in pain. In the sparshasahatva (58%),on functional score(57%),grip strength(56.5%)relief was seen.

In numbness (56%) relief was seen and total relief is (57%)which is statistically highly significant. In a current study the treatment found significantly effective in treatingvatarakta.

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