



# International Research Journal Of Integrated Medicine & Surgery

## STUDY OF THE EFFICACY OF PATOLADI KWATH IN THE MANAGEMENT OF VATRAKTA WITH SPECIAL REFERENCE TO GOUT.

### ABSTRACT

Vatarakta is one of the most common disease in the world. This disease not only affects physically but also mental well-being of an individual. The incidence and prevalence of Vatarakta (Gout) are rising likely as a result of changing patterns of life. At present risk factors in populations are growing due to the fact that the current dietary and lifestyle choices contribute to the increased rates of co-morbidities associated with hyperuricaemia and gout.

A open uncontrolled study was done in Seth R. V. Mahavidyalaya Sion, Mumbai-22.30 individuals were taken, Subjective criteria was assessed based on following symptoms-*Daha, sandhishool, sandhi stabhata, sandhi vaivarya, sandhishooth, kriyakashtata*. Whereas objective criteria was assessed by checking serum uric acid. Wilcoxon test and Paired t test were applied to the study, concluding definitely that Patoladi kwath is very effective in relieving symptoms of the Vatarakta.

### INTRODUCTION

Ayurveda the upaveda of Atharva veda is an ancient science of life which aims at

**स्वस्थस्य स्वास्थ्य रक्षणम आतुर्यस्य विकार  
परिमोक्ष ॥ च.सू १**

The beauty of this science not only aims to cure the disease but also to maintain the healthy life of an individual. What we phrase today as "Prevention is better than cure" has been quoted thousands of years back. Ayurveda is an "anandi anant" shastra comprising of continuous flow of knowledge and its concepts are applicable in all the four yugas.

**सोऽमयुर्वेदः शाश्वतो निर्दिश्यते |**

**स्वभावसंसिद्ध लक्षणत्वात्**

**भावस्वभावनित्यतवात् च ॥ च.सू ३०/२७**

Its principles are self defined and thus its efficacy and ability need not be proved. Nowadays lifestyle is changing. It is

becoming more and more luxurious. People do not follow proper dinacharya, rutucharya as mentioned in the texts. Changing lifestyles, food habits, luxuries, decreased tendencies of exercise, more and more vehicle riding, are the factors leading to various metabolic and joint disorders. Vatarakta is one among such diseases. Despite the obvious similarity between vatarakta and gout, vatarakta is nonetheless very different, it is a distinct etiology and pathology based on interaction and influences of vata and rakta.

The joint diseases are becoming main health problem in the present era. Vatrakta is a very painful condition and it curtails the output of day to day work .Wide description of the disease shows vatrakta was one of the main articular diseases in the past. In the last two centuries its prevalence is increasing day by day.



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While thinking of the treatment, satisfactory treatment is still not available for gout according to modern science because they have a range of analgesics like opioid analgesics, NSAID's, cox inhibitor and xanthine oxidase inhibitors like allopurinol, febuxostat etc. But in spite of immense development in pharmaceutical science they are stuck with most of the side-effects of this drugs viz. addiction, gastric irritation, renal damage etc.

At this junction ayurveda gains the ground as most of ayurvedic Medicines are herbal preparations with minimal hazardous side-effects and are aimed towards treating the root cause of the disease and not just the symptoms. So the thought of exploring a drug which is described as having properties to lower uric acid level as well as reduce signs and symptoms of vatarakta from the root, triggered this clinical research. There are number of medicines described for the treatment of vatarakta in which Patoladi kwath is cost-effective and easily accessible.

According to Chakradatta Patoladi Kwath with diet correction cures vatarakta.

**पटोलकटुकाभिरु त्रिफलाऽमुता साधितम ।  
क्वाथमपित्वा जयेज्जन्तुः सदाह वातशोणितम  
॥ चक्रदत्त (वातशोणीतीय)**

Patol having Ushna Veerya, Katu Vipak does Aam pachan and Raktaprashaman with the help of tikta Rasa.ushna veerya subsides vataprakop.

Kutaki having Tikta Rasa, Sheeta veerya acts as Raktaprashamak.

Shatavari along with madhur, tikta ras, sheeta veerya, madhur vipak and guru, snigdha guna decreases ushna, vidah guna of rakta along with rakta prasadhan and vata shaman.

Triphala having madhur vipak, panch ras and being tridoshar acts on all the three doshas.

Guduchi having snigdha guna subsides ruksha guna of vata, kaṭu, tikta, kaṣaya rasa, madhura, uṣṇa virya is described as the best medicine for vatarakta. Therefore we chose this particular drug with the objective of providing relief in vatarakta. In vatarakta patients, with the help of ayurveda we have planned the use of Patoladi Kwath as the best medicine for vatarakta.

## MATERIALS AND METHODS

### Selection of cases

There was random selection of patient from Sheth R. V. Ayurvedic Hospital, Sion; Mumbai, India. Known cases of Vatarakta were taken. Study was carried out as per Ethical Clearance Number-AMS/16/15-16

### Type of study

Open Uncontrolled study

### Inclusion Criteria

- 1. Patient in the age group of 35 year to 65 years.
- 2. Both sexes were included.
- 3. All the patients clinically diagnosed as vatarakta (gout).
- 4. Hyperuricaemic patients with symptoms of gout.

### Exclusion criteria



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- 1. Patients suffering from Secondary gout.
- 2. Patients with chronic tophaceous gout.
- 3. Patients with renal failure.
- 4. Patients diagnosed with tuberculosis arthritis, destructive arthropathies etc.
- 5. Pregnancy and lactating mothers.
- 6. Patients having h/o kochs, MI etc.

**Total no. of subjects:** 30

**Duration of study:** 28 days

**Formulation:** kwath

**Mode of administration:** Oral

**Dosage:** 40ml twice a day

**Follow up:** Every 7 days after first visit.

**Assessment of Efficacy**

## A] Subjective improvement

- General & systematic examination of patients at every 7 days visits up to 28days.
- Weakly assessment in the reduction of following symptoms:
  - Daha (burning sensation)
  - Sandhishool (Joint pain)
  - Sandhistabthata (Joint stiffness)
  - Sandhi tamravarnata/shyavata (Discoloration of skin above joint)
  - Sandhi sparshasahatva (Tenderness)
  - Sandhi kriya kasthata(Prasaran aakonchanyo vedana)
  - Sandhi shooth(Joint swelling)

## B] Objective improvement

Serum uric acid level

**Gradation according to symptoms is as follows**

### 1) Daha-

Grade 0- no daha at all

Grade 1- occasionally localised daha for more than half an hour daily

Grade 2- daha throughout the day but well tolerated

Grade 3- severe degree of daha that is intolerable

### 2) Sandhi shool (Joint pain)

Grade 0 - no pain

Grade 1 - pain felt only at time of movement

Grade 2- persistent pain even without movement but not affecting daily routine

Grade 3 - persistent pain even without movement and affecting daily routine

### 3) Sandhi stabhadata(Joint stiffness)

Grade 0 - no stiffness

Grade 1 - painful movements

Grade 2 - restricted movements

Grade 3 -Total loss of movements

### 4) Sandhi Shyavta/Tamravarnata (Discoloration of skin above joint)

Grade 0 - nil

Grade 1 - mild

Grade 2 - moderate

Grade 3 - severe



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## 5) Sandhi sparshasahatva(Tenderness over joint)

Grade 0 - no tenderness

Grade 1 - tender but bearable

Grade 2 - tender and winced

Grade 3 - tender, winced and withdraw

## 6) Sandhi kriyakasthata(Aakunchan prasaran samayi vedana)

Grade 0 - nil

Grade 1 - mild

Grade 2 - moderate

Grade 3 - severe

## 7) Sandhi shoth( Swelling over joint)

Grade 0 - No swelling/not covering the bony landmarks of joints

Grade 1 - Just covering the bony prominence

Grade 2 - Considerably above the landmarks non pitting edema

Grade 3 - pitting edema

## STATISTICAL ANALYSIS

The subjective parameters were assessed by applying “**Wicoxon Matched-Pairs Signed Ranks Test**” as the criteria were Non parametric. Also, subjective improvement is shown in Percentage relief.

As there were two groups under this study the objective parameters were assessed by applying “**Paired t Test**”.

### Percentagewise Symptomatic relief

SR.NO.	SYMPTOMS	BT	AT	DIFF	% OF RELEIF
1	DAHA	54	24	30	55.5
2	SANDHISHOOL	65	22	43	66.15
3	SANDHISTABDHATA	54	21	33	61.11
4	SANDHIVAIVARNYA	45	16	29	64.44
5	SPARSHASAHATVA	66	25	41	62.12
6	KRIYAKASHTATA	60	17	43	71.66
7	SANDHISHOTH	76	44	32	57.8

### TOTAL EFFECT OF THERAPY

Table showing total effect of therapy (Subjective Criteria)



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TOTAL IMPROVEMENT	NO. OF SUBJECTS	PERCENTAGE
EXCELLENT(>75%)	4	13.33%
GOOD (51-75%)	18	60%
MODERATE (25-50%)	8	26.66%
NO IMPROVEMENT	0	0%

**Table showing total effect of therapy (Objective Criteria)**

NO	DECREASE IN SR.URIC ACID LEVEL	RESULT	NO.OF SUBJECTS
1.	No change	No result	0
2.	0-1 mg/dl	Moderate result	1
3.	1.1-2 mg/dl	Good result	4
4.	>2 mg/dl	Excellent result	25

**Statistical analysis of subjective criteria:**

SR. NO.	SYMPTOMS	BT	AT	D	DIFF SE	W	PAIRS
		MEAN±SD					
1	DAHA	1.80±0.55	0.80±0.484	1.00±0.371	0.06	406	28
2	SANDHISHOOL	2.1670. ±698	0.966±0.764	1.200±0.924	0.16	384	29
3	SANDHISTABDHATA	1.80±0.714	0.700±0.466	1.100±0.712	0.13	325	25
4	SANDHI SHYAVA/TAMRA VARNATA	1.433±0.626	0.533±0.571	0.900±0.547	0.10	300	24
5	SANDHI SPARSHASAHATVA	1.967±0.162	0.833±0.136	1.13±0.628	0.11	351	26
6	SANDHI KRIYAKASHTATA	1.933±0.739	0.66±0.666	1.267±0.827	0.15	325	25
7	SANDHISHOTH	2.533±0.507	1.267±0.691	1.267±0.691	0.12	378	27



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## Statistical analysis of subjective criteria:

	SERUM URIC ACID LEVEL		
	BT	AT	BT-AT
MEAN	9.403	6.703	2.700
SD	1.245	1.035	0.880
N	30	30	30
SE	0.207	0.188	0.160
P	0.0001		
T29	16.804		
SIGNICANCE	<i>EXTREMELY SIGNIFICANT</i>		

### Discussion:-

Total 30 patients were enrolled for the study. All of them have regular follow-up. They were enrolled in a special case Performa made for clinical study. Separate criteria for assessment were prepared for them. A definite change in the disease state of patients was observed during the study. Improvement noted was measured by using the standard methods of scoring for subjective, objective and investigation criteria. The stages of inflammatory disorders assessed before and after.

Following Subjective criteria was assessed weekly.

- DAHA
- SANDHISHOOL
- SANDHISTABDHATA
- SANDHI SYAVA/TAMRA VARNATA
- SANDHI SPARSHASAHATVA
- SANDHI KRIYAKASHTATA



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- SANDHISHOTH

Following Objective criteria was assessed before and after treatment

- SERUM URIC ACID LEVEL

The follow up schedule was as follows

- ✓ **1<sup>st</sup> follow up:** At the end of 7 days
- ✓ **2<sup>nd</sup> follow up:** At the end of 14 days from baseline.
- ✓ **3<sup>rd</sup> follow up:** At the end of 21 days from baseline.
- ✓ **4<sup>th</sup> follow up:** At the end of 28 days from baseline

Blood samples were taken for analysis of CBC with ESR, Renal function test, RA test at the start of the study.

### ACKNOWLEDGEMENT

We humbly express our gratitude with profound respect towards Alarsin Pharma Ltd. Mumbai for Standardization. We are also grateful to Sheth R.V. Ayurved Rugnalaya, Sion, Mumbai-22.

### CONCLUSION

The study entitled “To study the effect of Patoladi kwath in the management of vatarakta with special reference to gout” was undertaken. Based upon the results of the clinical study displayed in the form of

tables and graphs and discussion made, conclusion is drawn:

- Data suggests extremely significant improvement in daha, shool, shoth, sparshasahatva, sandhistabdhatva, kriyakashtata and sandhivaivarnya (shyav/tamra). Assessment was done with Wilcoxon signed rank test. P value is <0.0001 for all symptoms respectively. Percentage relief in daha was 55.5%, shool was 66.15%, sandhishoth was 57.8%; in sparshasahatva was 62.12%, sandhistabdhatva was 61.1%, kriyakashtata 71.66% and in sandhivaivarnya 64.4%.
- Patoladi kwath is found significantly effective on hyperurecaemia. Patoladi kwath shows significant activity to lower serum uric acid level.
- No adverse effect was found during or after treatment.
- Present study showed that majority of patients 18(60%) got good result and 4 patients (30%) got excellent result in their symptoms and 8(26.6) patients got moderate result.
- It was observed that, the drug has some positive effect on symptoms like Mala-Vibandh.





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- It was observed that being in decoction form and bitter in taste the drug is less palatable, so to increase the palatability and efficacy, the drugs can be administered in the form of Ghanasara and Capsules respectively.

Hence after the clinical study it can be concluded that, selected treatment works not only at symptom level but also at Samprapti level i.e. Patoladi kwath acts as a vatanashak, shulghna, shothaghna and subsides shoola by its Snigdha, guru guna and ushnaveerya. Ruksha, Laghu and Sheetagnas of vata responsible for shula gets subsided. Alleviation of vata and madhura rasa and madhur vipak might be responsible to nourish the AsthiDhatu. Also tikta, katu rasa and ushnaveerya of guduchi helps in Sthanik Pachan of doshas in srotorodhpradhan samprapti. Patol having Ushna Veerya, Katu Vipak does Aam pachan reducing shool and Raktaprashaman with the help of tikta Rasa.

Kutaki having Tikta Rasa, Sheeta veerya acts as Raktaprashamak and thus decreases daha, sparshasahatva and shooth .

Shatavari along with madhur, tikta ras, sheeta veerya, madhur vipak and guru, snigdha guna decreases ushna, vidah guna of rakta along with rakta prasadhan and vata shaman.

Guduchi having katu, tikta, kashaya rasa, madhura, ushna virya is described as the best medicine for vatrakta.

In this study drug was given orally only for 28 days. As Vatarakta(gout) is a JeernaVyadhi, Patoladi kwath should be administered for a prolonged period

in repeated cycle, so that more beneficial results can be achieved.

Vatarakta (gout) is one of the major diseases in all inflammatory joints disorders because of which patient faces discomfort. By taking also the above facts into consideration it can be said that Patoladi kwath is very effective in relieving symptoms of the Vatarakta.

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