



A COMPARATIVE STUDY OF BODHITAWAK CHURAN IN THE MANAGEMENT OF VATA-RAKTA W.S.R ANUPANA MADHU AND JALA

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ABSTRACT

Now days the word Ayurveda is almost known to everyone and is the oldest science serving the humanity till from the beginning of life on this earth. Through the present clinical trial a small effort is made to prove the above words. This clinical study helps to reduce the pain and swelling of GOUT patients. This study aim to reduce the Pain, Swelling, Tenderness, Stiffness and Burning Sensation of joints. The study has great positive effect on the phenomenon of GOUT. Acharya charak mention use of BODHIVRIKSHA TAWAK in churana with madhu for the management of vata-rakta. 15 patients were selected of vata-rakta which were given Bodhivriksha Tawak with Madhu for 45 days and 15 patients were selected of vata-rakta which were given Bodhivriksha Tawak with Jala for 45 days. The patients those treated with Bodhivriksha Tawak with Madhu shows significant results in the management of Vata-rakta. In this study we concluded that the *bodhitwak churna* with *madhu* as *anupana* for *vata rakta* is beneficial but should not be used in anemic patients.

KEYWORDS: Vatarakta, Bodhivriksha tawaka, Gout, Madhu, Jala.

INTRODUCTION

Ayurveda has started three shashwata sutras in which entire ayurveda are described. These are "Hetu Sutra" i.e. predisposing factors for the formation of diseases. Second one is "Linga Sutra" Signs i.e. symptoms of the disease and third one is "Aushadhagyana" through which the disease will be cured.^[1] The main reason for selecting this topic is the folk Lore's evidence regarding the analgesic and anti-inflammatory activity of Bodhivriksha Tawak. Acharya Charak mentioned the use of Bodhivriksha Tawak in churan form for the treatment of vata-rakta.^[2]

Vata-rakta (gout) occurs worldwide in all races, sexes, age and climate. This disease is two or three time more prevalent among male than female by the usual diagnostic criteria.^[3] The specific etiological factors of vata-dosa and rakta dhatu separately leading to the morbidity of the same with the involvement of raktamarga is about the first clinical variety of vata-rakta.^[4]

In the second clinical type instead of etiological factors of *vata-rakta*, it is the etiological of *kapha* and *medas* that initiates the illness. The etiological factors of *kapha* and *medas* obviously lead to the morbidity of the same. This abnormally increased *kapha* and *medas* in turn get

accumulated in the *Rakta marga* causing the provocation of *vata* as well *rakta*.^[5]

Vata-Rakta is the disorder where the pain is the predominant symptom which hampers day to day life of patients. It is a disorder of *vata* associated with *rakta*. The chief complaint of patient is severe joint pain with onset on *hasta*, *pada*, *mulgata sandhi* and migrates to other joints in a way similar to *Aakhuvisha*.^[6]

Vata-Rakta is better correlated with "GOUT" in the modern medical science. Gout is the metabolic disorder having the incidence of 0.2 to 2.5 per 1000, with an overall prevalence of 226 per 1000. Gout is rare in children and pre-menopausal female in India. Out of the affected population male are more common while female of post menopausal group are in more risk.^[7] Gouty Arthritis has onset of symptom in great toe in 2/3 of the population while remaining has in other joints. The tissues around the joints are swollen, hot, red and extremely painful especially in night.^[8] The line of treatment in the modern medicine is NSAIDs/ Colchicine/ Glucocorticoids.^[9] But they are not safe. So being an alarming Problem *Vata-Rakta* needs more safer and effective management.

Keeping its prevalence, I have chosen this clinical condition for my research. The chosen drug is **Bodhivriksha Twak** (*Ficus Religiosa Linn.*). It has *kasaya madhura rasa* and *guru, ruksha guna katu vipaka* and *shita virya*.

MATERIAL AND METHODS

Aim of the Study

- To review classical and scientific literature regarding bodhivriksh twak.
- Pharmacological study of the trial drug bodhitavak.
- To assess the clinical efficacy of the drug on vata-rakta.

Source of patients

30 patients were randomly selected from the O.P.D of kayachikitsa uttanchal ayurvedic hospital, dehradun, having the sign and symptoms of vata-rakta after fulfilling the criteria of inclusion and exclusion taken for the study.

Inclusion Criteria

- 1) Patients with in age group of 20-60 years irrespective of sex, cast, religion, economic status.
- 2) Patients having clinical features of *vata-rakta* as described in Ayurveda (Shvyathu, Stabdtha, Kathintha, Sandhi daha and toda).
- 3) Diagnosed patients of *Vata-Rakta* (GOUT)
- 4) Patients having serum uric acid level 5.5 to 10.0mg/dl.

Exclusion Criteria

- 1) Patients with chronic Debilating Disease.
- 2) Patients having cardio vascular diseases.
- 3) Patients below 20 years and above 60 year.
- 4) Patients suffering from any Infectious disease.
- 5) Diagnosed cases of Thyroid abnormalities.
- 6) Patients of CRF and Heptic disorder.
- 7) Immuno-compromised patients
- 8) Patients of Gout associated with any severe arthritis condition (such as Rheumatoid arthritis) will be excluded from study.

Investigation

Following are the list of investigation carried out in 30 patients of vata-rakta taken for this study.

Blood Examination:-

- Hb
- Serum uric acid
- Serum Cretinine

Other Examination

- X-ray of related joint
- Urine Routine & Microscopic Examination

Design

It is the randomize open clinical trial with a pre-test and post-test design. In this study 30 patients diagnosed as vata-rakta.

Intervention

The selected patients were studied with

- 1) 30 patients divided in two groups group-A and group-B
- 2) Each group having 15 patients.
- 3) Bodhivriksha tawak in churn form with madhu and jala in each group in 3gm B.D dose.
- 4) This oral medication was continued for 45 days with the anupana of madhu and jala.

Duration of the Assessment criteria

The state of the disease vata-rakta changes after intervention. Improvement or otherwise was determined by adopting the standard methods of scoring for subjective, objective, and special investigation criteria are given as follows.

1) Pain

Severe pain	-	3
Moderate pain	-	2
Mild pain	-	1
No pain	-	0

2) Tenderness

Patients complain of pain withdrawn-	3
Patients complain of pain & wincing -	2
Patients complain of pain	- 1
No Tenderness	- 0

3) Swelling

Gross Swelling	-	3
Moderate Swelling-	2	
Slight Swelling	-	1
No swelling	-	0

4) Stiffness

Severe	-	3
Moderate	-	2
Mild	-	1
No stiffness	-	0

5) Burning Sensation in joint

Severe Burning Sensation	-	3
Moderate Burning Sensation-	2	
Mild Burning Sensation	-	1
No burning Sensation	-	0

Study:- 45days

RESULTS

Group-A

In Swelling there was 65.04% relief which is highly significant as ($p < 0.001$), in stiffness there was 82.25% relief which is highly significant as ($p < 0.001$), in tenderness there was 70.55% relief which is highly significant as ($p < 0.001$), in burning sensation 86.02% relief which is highly significant as ($p < 0.001$), in joint pain 76.28% relief which is highly significant as ($p < 0.001$).

Sin& symptom	mean		Mean difference	%age relief	S.D	S.E	t-value	p-value	Remark
	BT	AT							
Swelling	2.46	0.86	1.6	65.04%	.507	.130	12.220	.000	<0.001
Stiffness	1.93	0.33	1.60	82.25%	.632	.163	9.798	.000	<0.001
Tenderness	1.8	0.53	1.27	70.55%	.560	.144	8.290	.000	<0.001
Burning Sensation	1.86	0.26	1.6	86.02%	.632	.163	9.798	.000	<0.001
Joint pain	2.53	0.6	1.93	76.28%	.703	.181	10.640	.000	<0.001

Group-A (Lab.Investigation)

In Hb there was 4.15% improvement which is insignificant as ($p > 0.005$), in serum uric acid there was

36.13% improvement which is highly significant as ($p < 0.001$), in serum creatinine there was 20.83% improvement which is highly significant as ($p < 0.001$).

Lab.Invest.	mean		Mean difference	%age relief	S.D	S.E	t-value	p-value	Remark
	BT	AT							
Hb	10.82	10.36	0.45	4.15%	.850	.219	2.065	.058	>0.05
S.Uric acid	7.86	5.02	2.84	36.13%	.620	.160	17.717	.000	<0.001
S.creatinine	0.96	0.76	0.20	20.83%	.096	.024	8.328	.000	<0.001

GROUP-B

Sin& symptom	mean		Mean difference	%age relief	S.D	S.E	t-value	p-value	Remark
	BT	AT							
Swelling	2.46	1.4	1.06	43.08%	.457	.118	9.025	.000	<0.001
Stiffness	2.26	1.46	0.87	37.33%	.676	.174	4.58	.000	<0.001
Tenderness	2.0	0.93	1.07	53.5%	1.032	2.66	4.00	.001	<0.05
Burning Sensation	2.13	1.2	0.93	43.66%	.883	.228	4.090	.001	<0.05
Joint pain	2.73	1.2	1.53	56.04%	.639	.165	9.280	.000	<0.001

In Swelling there was 43.08% relief which is highly significant as ($p < 0.001$),

relief which is highly significant as ($p < 0.05$), in burning sensation 43.66% relief which is highly significant as ($p < 0.05$), in joint pain 56.04% relief which is highly significant as ($p < 0.001$).

In stiffness there was 37.33% relief which is highly significant as ($p < 0.001$), in tenderness there was 53.5%

(Group-B-Lab.Investigation)

Lab.Invest.	mean		Mean difference	%age relief	S.D	S.E	t-value	p-value	Remark
	BT	AT							
Hb	10.88	10.6	0.28	2.57%	.455	.117	2.381	.032	<0.05
S.Uric acid	8.19	6.87	1.32	16.1%	.706	.182	7.238	.000	<0.001
S.creatinine	1.0	0.83	0.17	17%	.081	.021	7.90	.000	<0.001

In Hb there was 2.57% improvement which is insignificant as ($p < 0.005$), in serum uric acid there was 16.1% improvement which is highly significant as (p

<0.001), in serum creatinine there was 17% improvement which is highly significant as ($p < 0.001$).

Inter group comparison of patients.

Sin & Symptom	%age relief		%age relief diff.	t-value	p-value	remark
	Gp-A	Gp-B				
Swelling	65.04%	43.08%	21.96%	-2.477	.027	<0.05
Stiffness	82.25%	37.33%	44.92%	-5.906	.000	<0.001
Tenderness	70.55%	53.5%	17.05%	-2.103	.054	>0.05
Burning	86.02%	43.66%	42.36%	-6.089	.000	<0.001
Sensation						
Joint pain	76.28%	56.04%	20.24%	-2.553	.023	<0.05

In Swelling there was 65.04% relief in Gp-A and 43.08% relief in Gp-B which is significant as ($p < 0.05$)

In Stiffness there was 82.25% relief in Gp-A and 37.33% relief in Gp-B which is highly significant as ($p < 0.001$).

In Tenderness there was 70.55% relief in Gp-A and 53.5% relief in Gp-B which is in significant as ($p > 0.05$).

In Burning sensation there was 86.02% relief in Gp-A and 43.66% relief in Gp-B which is insignificant as ($p < 0.001$).

In Joint pain there was 76.28% relief in Gp-A and 56.04% relief in Gp-B which is in significant as ($p < 0.05$).

Intergroup comparison of lab Investigation.

Lab. Invest.	%age relief		%age relief diff.	t-value	p-value	remark
	Gp-A	Gp-B				
Hb	4.15%	2.57%	1.58%	-0.942	.362	>0.05
S.uric acid	36.13%	16.1%	20.03%	-6.824	.000	<0.001
S.creatinine	20.87%	17%	3.87%	-1.037	.317	>0.05

Intergroup of lab.

In Hb there was 4.15% improvement in Gp-a and 2.57% improvement in Gp-B which is insignificant as ($p > 0.05$).

In S.uric acid there was 36.13% improvement in Gp-A and 16.1% in Gp-B which is highly significant as ($p < 0.001$).

In S.creatinine there was 20.87% improvement in Gp-A and 17% in Gp-B which is insignificant as ($p > 0.05$).

Clinical Study

Patients treated with bodhitawak with madhu had marked remission of the symptoms of swelling. 2.46 was the mean of initial score of 30 patients of vata-rakta which came down to 0.86 after the treatment. The improvement is 65.04% is found to be statistically highly significant as ($p < 0.001$) and the Patients treated with bodhitawak churn with jala had marked the symptom of swelling. 2.46 was the mean of initial score of 30 patients of vata-rakta which come down to 1.4 after the treatment. The improvement is 43.08% is found to be statistically highly significant as ($p < 0.001$).

Stiffness is one of the another symptom of vata-rakta relived by 1.93 mean at initial score of 30 patients of vata-rakta which came down to 0.33 mean after the treatment. The improvement is 82.25% is found to be statistically highly significant ($p < 0.001$). and the patient treated with bodhitawak churn with jala the stiffness in patients of vata-rakta relived by 2.26 mean at initial score of 30 patient which came down to 1.46 mean after the treatment. The improvement is 37.33% is found to be statistically highly significant as ($p < 0.001$).

Tenderness is another symptoms of vata-rakta. The initial mean score of the patients in tenderness was 1.8 which was reduced to 0.53 after the treatment. The improvement is 70.55% is found to be statistically highly significant as ($p < 0.001$). and the patients treated with bodhitawak churn with jala in Tenderness the initial mean score of the patient who treated with bodhitawak churn with jala is 2.0 which was reduced to 0.93 after the treatment. The improvement is 53.5% is

found to be statistically which is highly significant as ($p < 0.005$).

Burning Sensation one of the cardinal symptom of vata-rakta. The initial mean score of out of 30 patients in burning sensation was 1.86 which was reduced to 0.26 after the treatment. The improvement is 86.02% is found to be statistically as ($p < 0.001$). and the patients treated with bodhitawak churn with jala in Burning sensation the initial mean score out of 30 patients who treated with bodhitawak churn with jala was 2.13 which was reduced to 1.2 after the treatment. The improvement is 43.66% is found to be statistically which is highly significant as ($p < 0.05$).

Pain mainly in joint is the another symptom of vata-rakta. The initial mean score out of 30 patients in joint pain was 2.53 which was reduced to 0.6 after the treatment. The improvement is 76.28% which is highly significant ($p < 0.001$). and the patients treated with bodhitawak churn with jala in Pain in joint the initial mean score out of 30 patients who treated with bodhitawak with jala was 2.73 which was reduced to 1.2 after the treatment. The improvement is 56.04% which is highly significant as ($p < 0.001$).

Before the treatment the mean of Hb was 10.82 after the treatment of bodhitawak churn with madhu this was reduced to 10.36. This result found after the treatment to be statistically insignificant as ($p > 0.05$). and the patients treated with bodhitawak churn with jala before the treatment the mean of Hb was 10.88 after the treatment of bodhitawak in churn form with jala this was reduced to 10.6. the result found after the treatment to be statistically which is insignificant as ($p < 0.005$).

Before the treatment of mean of serum uric acid was 7.86 after the treatment of bodhitawak churn with madhu this was reduced to 5.02. This improvement after the treatment was found to be statistically highly significant as ($p < 0.001$) and the patients treated with bodhitawak churn with jala before the treatment the mean of S.uric acid was 8.19 after the treatment of bodhitawak in churn form with jala this was reduced to 6.87. the

result found after the treatment to be statistically which is highly significant as ($p < 0.001$).

Before the treatment of mean of serum creatinine was 0.96 after the treatment of bodhitawak churn with madhu this was reduced to 0.76. This improvement after the treatment was found to be statistically highly significant as ($p < 0.001$) and the patients treated with bodhitawak churn with jala before the treatment the mean of S. creatinine was 1.0 after the treatment of bodhitawak in churn form with jala this was reduced to 0.83. the result found after the treatment to be statistically which is highly significant as ($p < 0.001$).

CONCLUSION

The combination of shaman treatment in the form of bodhitawak churn with madhu and bodhitawak churn with jala is an ideal regimen in patient's suffering from vata-rakta.

The bodhitawak churn has better result when taken with madhu it may be due to madhu is yogavahi.

Hb level reduces minorly after taken bodhitawak churn without any side effect it is the topic of further research?.

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