



Research Article

TO STUDY THE EFFICACY OF KANCHNAR GUGGULU AND DASHMOOL MATRA BASTI IN THE MANAGEMENT OF VATASHTHEELA W.S.R TO BENIGN PROSTATIC HYPERPLASIA

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ABSTRACT

Benign prostatic hyperplasia is a common senile disease. It is a non-cancerous [benign] enlargement of the prostate gland, also called as fibromyoadenoma. It is involuntary hyperplasia due to disturbance of the ratio and quantity of circulating androgens and estrogens. As the age advances the serum testosterone levels slowly but significantly decreases, but levels of oestrogenic steroids are not decreased equally. According to this theory the prostate enlarges because of increased oestrogenic effects. It is likely that the secretion of intermediate peptide growth factors plays a part in the development of BPH. *Vatashtheela* as described in Ayurveda, closely resembles benign prostatic hyperplasia of modern medicine in its signs and symptoms. In the *Vatashtheela*, *Mutravaha Srotodushti* and vitiation of *Vata* and *Kapha Doshas* are involved. So *Vata Kapha* pacifying drugs along with *Matra Basti* considered to be helpful in reducing the size of prostate and enhancing the tonicity of urinary bladder.

This study was conducted to find out the potency of Ayurvedic regimen of *Kanchnar Gugglu* orally and *Dashmool Tail Matra Basti* for the treatment of *Vatashtheela* as the *Kanchnar Gugglu* is having *Granthihar* property and *Dashmool Tail* pacifies *Vata* and having *Tridoshghana*, *Deepana*, *Anulomana*, *Shothghana* and *Shoolghana* properties.

The drug *Kanchnar Gugglu* was given to 30 patients of group -1, with the dose of 500mg TDS before meals for 30 days. And *Dashmool Tail Matra Basti* was given to 30 patients of group - 2, with the dose of 50ml once a day for 15 days.

KEYWORDS: Benign prostatic hyperplasia, *Vatashtheela*, *Matrabasti*, *Kachnargugglu*, *Dashmool tail*.

INTRODUCTION

Sushruta "The pioneer of Indian Surgery" has explored the subject of urology very vividly and was the first to describe the diseases elaborately occurring in the urinary system. Therefore an effort has been made in this study to critically analyze the available references in relation to *Vatashtheela*^[1]. According to Ayurvedic principles, the vitiated *Vata* gets obstructed in the urinary bladder and anal canal, which causes formation of immobile, elevated structure with extremely painful stone mass which is in turn causes obstruction in the passage of urine and faeces. This condition correlates to the symptomatology of the disease BPH^[2].

Benign prostatic hypertrophy is one of the major clinical condition related with ageing process. BPH is a disease found in elderly males which involves hyperplasia of the prostatic stromal and

epithelial cells resulting in the formation of largely fairly discrete nodules in the periurethral region of prostate. When sufficiently large nodules compress the urethra, it causes partial or complete obstruction of urethra which interferes with the normal flow of urine. It leads to the symptoms like urinary resistance, frequent micturition, increased risk of urinary tract infections, urinary retention etc^[3]. It is probably caused by changes that occur in hormonal activity with increasing age. The imbalance between androgen or oestrogen may be the causative factor. Enlarged prostate compresses the prostatic venous plexus causing congestion, called as vesical piles leading to haematuria.^[4]

The changes of benign hypertrophy may involve one or more lobes of the prostate.^[5]. Involvement of the lateral lobes can be appreciated

by rectal examination whereas involvement of middle lobe cannot, no matter how extensive the change becomes.^[6]

Surgical treatment has been accepted as the standard management but associated with many disadvantages as well as complications such as retrograde ejaculation, erectile dysfunction, infection, hemorrhage, stricture which may not be acceptable at this age. Conservative management with modern medicines is also not free from side effects namely decreased libido, hypotension, impotency etc. In order to avoid these side effects many works have been carried out and shown that Ayurvedic treatment is a far better approach.

Plan of Study

Group	Formulation	Route	Dose	Time	Duration
1	<i>Kachnar gugglu</i>	Orally	500 mg	TDS	30 Days
2	<i>Dashmool tail</i>	<i>Matra basti</i>	50 ml	OD	15 Days

All the patients were assessed before and after treatment by using International prostate severity score. Data were analysed statistically by using Wilcoxon sign rank test.

Inclusion Criteria

1. Age group between 40-70 yrs.
2. Signs and symptoms of BPH.
3. Subjective with mild BPH as per American urological association symptoms score index.
4. USG of prostate suggestive of increased size and weight.

Exclusion Criteria

1. Subjects below 40 and above 70 yrs of age.
2. Acute retention of urine.
3. Prostatic carcinoma.
4. Neurogenic bladder.
5. Urinary calculi
6. Renal failure

Subjective Criteria

International Prostate Symptom Score [IPSS]

IPSS	Not at All	Less Than 1 in 5 Times	Less Than Half the Time	About Half the Time	More than Half Time	Almost Always
Incomplete emptying	0	1	2	3	4	5
Frequency	0	1	2	3	4	5
Intermittency	0	1	2	3	4	5
Urgency	0	1	2	3	4	5
Weak stream	0	1	2	3	4	5
Straining	0	1	2	3	4	5
Nocturia	0	1	2	3	4	5
IPSS	0	1	2	3	4	5

As we know it is the vitiated *Vata* which is responsible for the manifestation of *Vatashtheela* and therefore a study to alleviate this *Vata* vitiation by a more holistic approach has been the aim. Two different formulations *Kachnar gugglu*^[7] and *Dashmool tail*^[8] *Matra basti* has been taken for separate trails.

MATERIALS AND METHODS

Source of Data

It was a two group study with pre test and post test design where in 60 patients were randomly selected from IPD and OPD of Jammu Institute of Ayurveda and Research and OPD of Sub-District Hospital Akhnoor and were divided into two groups of 30 patients in each group.

Differential Diagnosis^[9]

- 1) Cystitis
- 2) Prostatic abscess
- 3) Carcinoma bladder
- 4) Foreign bodies in the bladder
- 5) Neurogenic bladder
- 6) Urethral stricture due to trauma

Investigations^[10]

- 1) Digital and Ultrasonographic examination of prostate gland.
- 2) Residual urine volume assessed by ultrasonography.
- 3) Routine haematological and urine investigations.
- 4) PSA, if necessary.

Total Score

0-7	Mildly Symptomatic
8-19	Moderately Symptomatic
20-35	Severely Symptomatic

Objective Criteria

- 1) Assessment of residual urine volume.
- 2) Assessment of urine flow rate.
- 3) Prostate size as assessed by per rectal digital examination and ultrasonography study.
- 4) Routine laboratory investigations.

Assessment Criteria

Result	Description
Complete cure	100% relief in subjective, objective findings and IPSS parameters
Maximum improvement	76% to < 100% relief in subjective, objective findings and IPSS parameters
Moderate improvement	51 to 75% relief in subjective, objective findings and IPSS parameters
Mild improvement	26 to 50% relief in subjective, objective findings and IPSS parameters
Unchanged	Up to 25% relief in subjective, objective findings and IPSS parameters

Observations

The present study revealed that incidence of BPH was more common in the age group 61-70 yrs i.e. 58.34% followed by 30% in 51-60 yrs. Maximum patients were Hindu (85%), 75% patients were from rural area, 40% were illiterate, 43.34% were farmers followed by 25% which were businessmen, 58.34% were habituated to vegetarian diet, 33.34% were addicted to smoking, 90% of the patients were having constipated bowel. Out of 60 patients, 41.67% were of *Vata-Kaphaja Prakriti*. The patients suffering with BPH have also complains of associated diseases among them, UTI was one i.e. 41.6%, followed by 6.66% patients of hernia and 15% patients of piles.

Conclusion and Results

Results shows that the treatment with *Kanchnar gugglu* and *Dashmool Matrabasti* is effective but on the inter-group comparison ($p < 0.05$) statistically insignificant results were found.

Status of Relief of Clinical Features in Both the Groups

Symptoms		BT	AT	M.D.	% Relief
Urine Flow Rate	Group 1	13.10	13.07	0.03	0.22%
	Group 2	14.17	13.43	0.74	5.22%
Prostate Size	Group 1	31.40	27.23	4.17	13.28%
	Group 2	31.13	27.47	3.66	11.57%
Nocturia	Group 1	2.07	1.43	0.64	30.91%
	Group 2	2.13	1.27	0.86	40.37%
Frequency	Group 1	3.07	1.77	1.3	42.34%
	Group 2	2.63	1.63	1	38.02%
Intermittency	Group 1	2.73	1.47	1.26	46.15%
	Group 2	2.27	1.47	0.8	35.24%
Straining	Group 1	2.93	1.63	1.3	44.36%
	Group 2	2.53	1.47	1.06	41.89%
Incomplete Voiding	Group 1	3.13	2.20	0.93	29.71%
	Group 2	2.73	2.00	0.73	26.73%
Weak Stream	Group 1	3.27	1.73	1.9	47%
	Group 2	2.63	1.63	1	38.02%
Urgency	Group 1	2.80	1.87	0.93	33.21%
	Group 2	2.33	1.67	0.66	28.32%
IPSS	Group 1	20.13	11.47	8.66	43.02%
	Group 2	17.93	10.93	7	39.04%

Mann-Whitney Test [For comparison between Group 1 and Group 2]

Ranks

	Grp_1	N	Mean Rank	Sum of Ranks
RUV_D	<i>Kanchnar_Gugglu</i>	30	29.87	896.00
	<i>Dashmool</i>	30	31.13	934.00
	Total	60		
Prostsz_D	<i>Kanchnar_Gugglu</i>	30	31.72	951.50
	<i>Dashmool</i>	30	29.28	878.50
	Total	60		
Nocturia_D	<i>Kanchnar_Gugglu</i>	30	29.50	885.00
	<i>Dashmool</i>	30	31.50	945.00
	Total	60		
Freq_D	<i>Kanchnar_Gugglu</i>	30	32.98	989.50
	<i>Dashmool</i>	30	28.02	840.50
	Total	60		
Intermittency_D	<i>Kanchnar_Gugglu</i>	30	34.63	1039.00
	<i>Dashmool</i>	30	26.37	791.00
	Total	60		
Straining_D	<i>Kanchnar_Gugglu</i>	30	32.83	985.00
	<i>Dashmool</i>	30	28.17	845.00
	Total	60		
Incomplete_Void_D	<i>Kanchnar_Gugglu</i>	30	33.10	993.00
	<i>Dashmool</i>	30	27.90	837.00
	Total	60		
Weakstream_D	<i>Kanchnar_Gugglu</i>	30	34.20	1026.00
	<i>Dashmool</i>	30	26.80	804.00
	Total	60		
Urgency_D	<i>Kanchnar_Gugglu</i>	30	33.43	1003.00
	<i>Dashmool</i>	30	27.57	827.00
	Total	60		

Test Statistics*

	RUV_D	Prostsz_D	Nocturia_D	Freq_D	Intermittency_D	Straining_D	Incomplete_Void_D	Weakstream_D
Mann-Whitney U	431.000	413.500	420.000	375.500	326.000	380.000	372.000	339.000
Wilcoxon W	896.000	878.500	885.000	840.500	791.000	845.000	837.000	804.000
Z	-.283	-.545	-.465	-1.204	-1.914	-1.066	-1.270	-1.736
Asymp. Sig. (2Tailed)	.777	.586	.642	.229	.056	.286	.204	.083

Test Statistics*

	Urgency_D
Mann-Whitney U	362.000
Wilcoxon W	827.000
Z	-1.394
Asymp. Sig. (2-Tailed)	.163

a. Grouping Variable : Grp_1

Using Mann-Whitney Test for evaluating the statistical difference between the two groups.

The statistical analysis showed significant results in all the clinical features of BPH with the $P < 0.05$ in intra group findings. But on the inter group comparison ($P > 0.05$) statistically insignificant results were found.

Group-1: The effect of therapy on this group of patients reveals statistically significant results in the symptoms like prostate size, nocturia, frequency, intermittency, straining, incomplete voiding, weak stream, urgency, IPSS but results are statistically insignificant in residual urine volume, urine flow rate.

Group-2: The effect of therapy on this group of patients reveals statistically significant results in the symptoms such as residual urine volume, prostate size, nocturia, frequency, intermittency, straining, incomplete voiding, weak stream, urgency, IPSS and results are insignificant in urine flow rate.

DISCUSSION

In Ayurveda it is explained that the vitiated *Apana Vata* when takes the seat in the space between *Guda* (rectum) and *Basti* (urinary bladder) produces *Sthira*, *Unnata* (elevated) *Astheelavat* (stone like growth). This growth in turn produces obstruction to passage of faeces, urine and flatus. This leads to pain in suprapubic region. This condition correlates to the symptomatology of the disease BPH.

Discussion on probable mode of action of formulation

Majority of ingredients of *Kanchnar guggul* have *Tikta*, *kashaya*, *Madhur Rasa*, *Ushana virya*, *Katu Vipaka*, *Laghu guna*, *Tikshana guna*, *Tridoshara* and *Vatahara* properties.

Due to *Tikta*, *Kshaya Rasa*, *Laghu*, *Ruksha guna*, *Kachnar guggulu* subsides aggravated *Kapha dosha*.

Due to *Ushana virya* it subsides *Vata* and *Kapha dosha*. *Pitta dosha* is subsided by its *Kashaya* and *Madhura rasa* properties.

Due to its *Ushana Virya* and *Laghu*, *Ruksha guna* stimulates the *Agni* and due to its *Ushana*, *Tikshana*, *laghu guna* and *Ushana Virya* removes *Srotorodha* and vitiation of *Vata* and *Kapha* is normalised.

Biochemical actions

Kachnar guggulu is proved in treating urinary tract disorders because ingredients of *Kanchnar guggulu* contains alkaloids such as Beta-sitosterol, lioleic acid, oelic acid which helps in reduction of 5 alpha reductase enzyme which is responsible for conversation of testosterone into dihydro-testosterone. So decrease in or controlling in DHTS ultimately control further growth of prostate gland and relieve symptoms of BPH.

Probable mode of action of *Dashmool taila*

All the ingredients of *Dashmoola taila* have properties such as *Tikta*, *Katu*, *Kashaya rasa*, *Laghu*, *Ruksha gunas*, *Ushana Virya* and *Katu vipaka*. Due to *Laghu*, *Ushana* and *Ruksha guna* it results in *Kapha-vatahara karma* and normalizes the vitiated *Kapha* and *Vayu*, hence break down the *Samprapati* of disease.

It is proved that *Matra basti* improves the general condition of patients nourishes, normalises the function of *Vata* and make natural urges of urination, defecation easy in the disease.

CONCLUSION

The quest for knowledge and research still continues but this research can be considered as milestone in the conservative treatment of benign prostatic hyperplasia.

1. Treatment with *Kachnar guggulu* (group-1) helped in relieving of symptoms such as prostate size, nocturia, frequency, intermittency, straining, incomplete voiding, weak stream, urgency, IPSS but there was no effect in symptoms such as residual urine volume and urine flow rate.
2. Treatment with *Dashmool matra Basti* on patients of group -2 helped in relieving of symptoms such as residual urine volume, prostate size, nocturia, frequency, intermittency, straining, incomplete voiding, weak stream, urgency, IPSS but had no effect on urine flow rate.

From whole statistical analysis we can conclude that the total effect of both formulations have provided significant relief on the subjective as well as objective parameters. The subjective complaints were relieved significantly in the range. Total mean score was reduced from severe to moderate after treatment.

So we hope that with increasing duration of treatment upto 3 months for *Kachnar gugglu* and upto 45 days for *Dashmool matra Basti*, we may get highly significant results.

Though the results are good in treating the symptoms of disease but further study with longer duration may lead to arrive at definitive conclusion.

REFERENCES

1. Shastri Ambika Dutta, Sushruta Samhita edition reprint 2010 Chaukhamba publications. Uttara tantra. Chap, 58/4.
2. Pandey Kashinath, Charaka Samhita, Chaukhamba bharti academy publication, Edition: Reprint 2009. Siddhi Sthana 9/36
3. SRB'S Manual of Surgery, edited by Sriram Bhat M. 3rd Edition, Jaypee Brothers Medical Publishers LTD chapter 26/986.
4. SRB'S Manual of Surgery, edited by Sriram Bhat M. 3rd Edition, Jaypee Brothers Medical Publishers LTD chapter 26/986.
5. Human Anatomy for students, by Byas Deb Ghose, Jaypee brothers medical publishers, 2nd edition, chapter 5/219.
6. Campbell's Urology, W.B. Saunders Company, 7th edition, 1998 Vol.2, chapter 45/1384.
7. Sarangdhar Samhita by Prof. K.R Srikanta Murthy, Chaukhamba Orientalia 4th edition 2001. Madhyamkhanda chapter no. 7/96,97,98,99,100.
8. Bhaishjya Ratnavali by Shastri Ambika Dutta, 112, Chaukhamba publication. chapter no. 65/111.
9. Bailey and Love, Bailey & Love's Short Practice of Surgery, edited by N.S Williams, R.C.G Russel, 24th edition 2008 chapter no. 77/1370.
10. Principles and Practice of Urology, Volume 2, by M.A. Salam, second edition. pp. 145.

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