



Research Article

A CLINICAL STUDY OF EFFECT OF *PATALA KSHAR* IN THE MANAGEMENT OF *MUTRAVAGHATA* WITH SPECIAL REFERENCE TO BENIGN PROSTATE HYPERPLASIA

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ABSTRACT

Vatashtila described by Acharya Sushruta is very much similar to Benign prostate hyperplasia. No doubt that it is disease which is difficult to cure and many times requires surgical intervention. All the other treatment modalities in modern science are very costly to cure the BPH. Hence we have to face many problems to treat BPH. Reviewing all the things “A clinical study of *Patalakshar* in the management of *Mutraghat* with special reference to Benign Prostate Hyperplasia” was selected for dissertation. In this study *Patala kshar* given orally to the BPH patients and follow up taken on 0th, 7th and 15th day. Tamsulosin was given to control group and follow up taken on same days as trial groups. Then we were found that *Patala kshar* effect is most of similar to modern conservative treatment tamsulosin. On the basis of statistical analysis it concluded that *Patala kshar* is similarly effective to tamsulosin.

KEYWORDS: *Patala, Kshar, Tamsulosin, Mutraghat, Benign prostate hyperplasia.*

INTRODUCTION

The person having, *Triades (Dosha, Dhatu and Mala)* and Agni in normal state. As well as sound mind, *Atma* and all *Indriya* is called as healthy only Ayurveda deals with spiritual aspect of life by including *Atma* and *Mana*.¹

It is very difficult to maintain health in day to day ultramodern life. While enjoying the advances and facilities provided by 21st century era, its loopholes or failures are also coming forward.

Since time is money for everybody, nobody has sufficient time to spare for the care of his health unless and otherwise it hamper their daily activities. Also, due to today's fast life normal urge like micturation, defecation is suppressed that leads to *Vegadharana*.²

Even Sushruta, an eminent surgeon of ancient times and today known to the world as the “Father of Surgery” has mentioned in his text, the “Sushruta Samhita” the importance of health and over all well being.

Benign prostate hyperplasia is a disease found in elderly males which involve hyperplasia of prostatic stromal and epithelial cells resulting in 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 intefers the normal flow of urine. It leads to the symptoms like urinary resistance, frequent micturation, increase risk of urinary tract infection, urinary retention.

Vatashteela Vyadhi may have similarity with BPH. According to Acharya Sushruta, vitiated *Vata* and *Kapha* produces hard gland in between Anus and Urinary Bladder which causes obstruction of urine and stool.

In Ayurvedic text, treatment of *Vatashteela* is not specified, but indicated to treat on the basis of

Mootraghata. Even in the 21st century we are unable to provide a single specific drug or medicine for BPH. In treatment of BPH watchful waiting is advised along with medicinal therapy like alpha blocker but it can be associated with side effect like Headache, Dizziness, Fatigue, Ejaculatory Dysfunction and 5 alpha reductase inhibitors having side effect like Erectile Dysfunction, decreased libido etc. In surgical therapy for BPH patient may be suffer from complication such as Retrograde Ejaculation, Erectile Impotence, Infection, Stricture, and Hemorrhage.

To avoid the complication of surgical therapy old people seek a safe and effective treatment for easy life, in this condition medicinal treatment can play important role.

Aim

The Effect OF *Patala Kshar* In The Management Of *Mutraghata* With Special Reference To Benign Prostate Heperplasia.

Objectives

To study the role of *Patala Kshar* in management of *Mutraghata*. To collect the literature of *Mutraghata* according to Ayurvedic Samhita and Modern Text.

Materials and Methods

Patients were classified into 2 groups.

Group A – 15 patients for experiment of *Patala kshar* i.e. Trial Group.

Group B – 15 patients were selected for Tamsulosine Hydrochlorde i.e. control Group. Patients were selected from OPD and IPD of Shalyatantra department, Bharati Ayurved Hospital, Pune 43. After taking proper history the diagnosis of BPH was confirmed by per rectal examination.

Inclusion Criteria

- Patient having *Mutraghata* were randomly selected
- Selection was irrespective of age, religion and socio-economical class.
- Grade I and grade II prostatomegaly patient were considered.

Exclusion criteria

- Ca. Prostate
- Diabetes
- Patient above 80 years
- Urethral stricture

- Bladder calculus
- Complication because of obstructed uropathy like vascical calculus and recurrent urinary tract infection.
- Patient had more than 30%post void urine pf total pre void urine.

Subjective Parameters

Subjective parameters were considered according to international prostate symptoms scores. This would be as per International Prostate Symptom Score.

Table 1: Subjective Parameters and Gradations

	Not at All	Less than 1 time	Less than ½ time	About ½ Time	More than ½ time	Almost Always
	0	1	2	3	4	5
Complete 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 streaming	0	1	2	3	4	5
Straining	0	1	2	3	4	5
Nocturnal Micturation	0	1	2	3	4	5

Table 2: Criteria According to Reduction in IPSS Score

IPSS Score	Criteria
1- 10	Mild
11- 20	Moderate
21- 30	Severe

OBJECTIVE PARAMETERS

1. Volume of prostate in USG
2. Residual urine in USG before and after treatment

1. Trial group

Number of patient: 15
 Treatment: *Patala kshar*
 Dose: 500mg B.D

2. Control group

Number of patient: 15
 Treatment: Tamsulosin hydrochloride 0.4 mg H.S
 Dose: 0.4 mg H.S

Follow up

Follow up was taken on 0th, 7th and 15th day which was recorded in tubular form.

OBSERVATIONS

During study we have come across following observations. Total no. of patients- 30

Observation and results

Age incidence:

Table 3: Age Group are taken in the study

Age Group	Trial Group		Control Group	
	Frequency	Percentage	Frequency	Percentage
50-60	4	26.7	5	33.3
60-70	11	73.3	8	53.3
70-80	0	0	2	13.3
TOTAL	15	100	15	100

• IN TRIAL GROUP

In 50-60 yrs age group patients are 4(26.7%), in 60-70 age group 11(73.3%), in 70-80 age group 0(0%).

• **IN CONTROL GROUP**

In 50-60 yrs age group patients are 5(33.3%), in 60-70 age group 8(53.3%), in 70-80 age group 2(13.3%).

Occupational Distribution

In both groups more incidence of BPH present in farmer class. Least occurrence in service class

Table 4: Occupational Distribution of Patients in the study

Occupation	Trial Group		Control Group	
	Frequency	Percentage	Frequency	Percentage
Driver	2	13.3	2	13.3
Farmer	6	40	6	40
Service	2	13.3	1	6.7
Labour (other)	5	33.3	6	40
Total	15	100	15	100

Table 5: Upashaya Anupashaya According to Incomplete Emptying

Incomplete Emptying	Mean		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	B.T.	A.T.				
Trial Group	4.27	2.67	-3.448a	.001	37.5	Significant
Control Group	4.60	2.87	-3.578a	.000	37.7	Significant

In case of Incomplete Emptying in both groups p value is <0.05 so results are significant in both. But more significant in control group.

Table 6: Upashaya Anupashaya According To Frequency

FREQUENCY	Mean		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	B.T.	A.T.				
Trial Group	4.20	2.53	-3.407a	.001	39.7	Significant
Control Group	4.20	2.80	-3.535a	.000	33.3	Significant

In frequency symptom in both groups p value is <0.05 so results are significant in both. But more significant in control group.

Table 7: Upashaya Anupashaya According to Intermittency

INTERMITTENCY	Mean		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	B.T.	A.T.				
Trial Group	3.87	2.07	-3.460a	.001	46.6	Significant
Control Group	3.40	2.00	-3.109a	.002	41.2	Significant

In intermittency symptom in both groups p value is <0.05 so results are significant in both. But more significant in trial group.

Table 8: Upashaya Anupashaya According To Urgency

URGENCY	Mean		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	B.T.	A.T.				
Trial Group	4.13	2.13	-3.349a	.001	48.4	Significant
Control Group	4.40	2.40	-3.499a	.000	45.5	Significant

In urgency symptom in both groups p value is <0.05 so results are significant in both. But more significant in control group.

Table 9: Upshaya anupshaya according to weak stream

WEAK STREAM	Mean		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	B.T.	A.T.				
Trial Group	3.47	1.93	-3.236a	.001	44.2	Significant
Control Group	3.40	2.13	-3.069a	.002	37.3	Significant

In weak stream symptom in both groups p value is <0.05 so results are significant in both. But more significant in trial group.

Table 10: Upshaya Anushaya According To Straining

STRAINING	Mean		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	B.T.	A.T.				
Trial Group	3.53	1.73	-3.108a	.002	50.9	Significant
Control Group	4.07	1.93	-3.448a	.001	52.5	Significant

In straining symptom in both groups p value is <0.05 so results are significant in both. But more significant in control group.

Table 11: Upashay And Anupshay According To Nocturia

NOCTURIA	Mean		Wilcoxon Signed Rank W	P-Value	% Effect	Result
	B.T.	A.T.				
Trial Group	3.87	1.93	-3.275a	.001	50.0	Significant
Control Group	4.07	1.87	-3.434a	.001	54.1	Significant

In nocturia symptom in both groups p value is <0.05 and equal in both groups so results are equally significant

Table 12: Prostate Volume In Both Groups

Prostate Volume	Mean		t-Value	P-Value	Result
	B.T.	A.T.			
Patala	30.87	30.27	2.073	.057	Not Significant
Tamsulosin	29.47	29.47	.000	1.000	Not Significant

Table 13: USG Residual

USG Residual	Mean		t-Value	P-Value	Result
	B.T.	A.T.			
Patala	148.87	135.80	1.247	.233	Not Significant
Tamsulosin	95.73	135.80	1.538	.146	Not Significant

Table 14: Reduction in IPSS Score after treatment for 15 Days in Both Group

IPSS	Mean		t-Value	P-Value	Result
	B.T.	A.T.			
Patala	27.47	14.87	11.896	.000	Significant
Tamsulosin	26.87	13.67	17.150	.000	Significant

For Between Group Comparison we have used unpaired t-test

From Above table we can observe that, P-Value is greater than 0.05 hence we conclude that there is no significant difference between Patala and Tamsulosin in these three criterias.

Results: Both methods show about same significant results.

DISCUSSION

In Benign Prostatic Hypertrophy there is an evidence of intermittent micturation. This is considered to be there as a result of Bladder neck obstruction. Our studies reveal that, In intermittency symptom in both groups p value is <0.05 so results are significant in both. But more significant in trial group. Thus *Patala kshar* is proved to be effective in Intermittency so as Tamsulosine Hydrochloride. Tamsulosine has action on alpha 1 receptors hence relaxes detrusor muscle hence effective in relieving intermittency. *Patala kshar* is believed to have same action on detrusor muscle as it practically relieves intermittency. Urgency in prostate enlargement is common. There is sort of incontinence in such patients. The urge of micturation is uncontrollable and sometimes patient can't hold the urine till he reaches the toilet. Due to continuous irritation of bladder and frequency, the sphincter muscles of bladder get affected. The drug used in *Patala kshar* is *Bastishodhan*, *Rasayana* and tonic to urinary bladder. These properties are helpful in strengthening of urinary bladder. This improves the symptom urgency.

In urgency symptom in both groups p value is <0.05 so results are significant in both. But more significant in control group. Hence tamsulosin is more effective than *Patala kshar* in this symptom.

This symptom is found in prostate enlargement. According to modern science, if there is chronic residual

urine, for long duration, it may cause cystitis changes in bladder. This causes *Sakashta Mutra* P:ravruti. If amount of residual urine is decreased, patient gets relief from the symptom. In straining symptom in both groups p value is <0.05 so results are significant in both. But more significant in control group. Hence Tamsulosin hydrochloride is more effective than *Patala Kshar* in this symptom.

As the amount of residual urine is decreased, patient gets relief from frequency of micturation and can sleep peacefully. This reduces the evidence of *Nakta Mutrata*. In nocturia symptom in both groups p value is <0.05 and equal in both groups so results are equally significant.

In Prostate enlargement, the stream of urine is very weak. The drugs used gives strength to urinary bladder. Thus, increase in the strength of urinary system, the force of urine improved. In straining symptom in both groups p value is <0.05 so results are significant in both. But more significant in control group.

The patient group treated by experimental drug got good results on this symptom. This was the first symptom to disappear after starting the treatment. In Prostate enlargement there is always residual urine in bladder. Due to this residual and irritation to bladder, the frequency of micturation is increased.

The drugs *Patalakshar* and Tamsulosin Hcl helps in decreasing the quantity of residual urine and irritation of bladder leading to relief in symptom *Muhurmuhu Mutra Pravrutu*.

In frequency symptom in both groups p value is <0.05 so results are significant in both. But more significant in control group.

In Context with Residual urine, both *Patala kshar* and Tamsulosine Hcl are equally effective.

From the practical study we interpret that there is

not any Reduction in size of Enlarged Prostate with treatment by both *Patala kshar* and Tamsulosine hydrochloride. Hence we say that both *Patala kshar* and Tamsulosine hydrochloride are effective at all in Reducing size of prostate.

This is an internationally standardized criteria for judging symptoms throughout practical observations. Conclude that there is significant reduction in IPSS score both by *Patala kshar* and Tamsulosine hydrochloride.

The point to be desired is that both *Patala kshar* and Tamsulosine hydrochloride are equally efficient in Reducing International Prostate symptom score.

Mode of Action of Patala kshar

1) Shodhan chikitsa

According to Acharya Susrut *Kshar* shows *Shodhan karma* described in Su.su 11/5 due to this it decreases symptoms intermittency and weak stream, straining and incomplete emptying

2) Lekhana Chikitsa

Katu ushna and *Tikshna dravyas* bring about scrapping of tissue which is enlarged. *Ksharas* are *Ushna* and *Tikshna* in *Guna* hence bring about scrapping of the tissue. *Ksharas* are famous for their *Lekhan karma*. *Kshar* is *Katu Ushna* and *Tikshna* hence by these *Gunas* it brings about *Lekhan* and indirectly reduced the symptoms like urgency frequency.

3) In *Vatasthilla kapha* and *Vata doshas prakopa* occurs and *Patala kshar* having property "*Tridosh-ghantvatvata*"³ so it acts on *Vata* and *Kapha* both *Doshas*. Hence decreases the associated symptoms.

4) *Patala Kshar* having *Bhedhan* property due to this it reduces the size of prostate in BPH.

5) In BPH because of obstruction most of the time urine

infection occurs as well as irritable symptoms like frequency, urgency, nocturia get worsen. Because of alkaline ph of *Kshar* urine pH gets alkaline so irritable symptoms get reduce.

6) Due to anti-inflammatory effect of ETHANOL extract which is present in *Patala Kshar* it reduces the size of prostate and associated symptoms.⁴

CONCLUSION

From whole statistical analysis we can conclude that Tamsulosin is more efficient than *Patala kshar* in present study. Though statistically *Patala Kshara* has less efficacy than Tamsulosin, the size of prostate was reduced in 15 days study(Which was statistically insignificant), So we hope that with increasing duration and by adding some more drugs will give good effects. Thus from above observations we can conclude the *Patala Kshar* can be the choice of drug in conservative Treatment of benign Prostatic Hypertrophy to reduce the symptoms mostly in Grade I and Grade II prostatomegaly by increasing duration of treatment course.

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