International Journal of Applied Ayurved Research ISSN: 2347- 6362

ROLE OF DASHMULADI COMPOUND IN THE MANAGEMENT OF BENIGN PROSTATIC HYPERTROPHY (ASTHEELA)

[1]P. L. Bharati, [2]H. K. Kushwah, [3]S. S. Sharma
[1]Research Officer–Ay.(S-2), National Research Institute for Ayurveda-Siddha Human Resource Development, Aamkho, Gwalior, M. P. India.
[2, 3]EX HOD &,ProfessorDept. of Shalya Tantra, National Institute of Ayurveda, Jaipur, Rajastan.

ABSTRACT :

Benign Prostatic Hypertrophy (*Ashtheela or Vatastheela)* is a type of disease which is mentioned under *Mutraghata* disorders in the Sushruta Samhita. *Astheela* as described in Ayurveda, occurs normally at the age of 40 or above and also associated with sexual dysfunction. Management of Ashtheela with Ayurvedic approach, using herbal medicines, is far better approach. *Dashmuladi compound* is prescribed in Yog Ratnakar for treatment of *Ashtheela* (BPH), however the reports pertaining the therapeutic uses of *Dashmuladi* in the management of Astheela are scarce. Therefore, this study has been undertaken to assess the clinical efficacy and safety of *Dashmuladi compound* in the management of BPH (A*stheela).* The patients were randomly and divided into two groups. In first group, placebo capsule was given orally twice a day with lukewarm water for 45 days; in second group, one capsule (500 mg) of *Shilajit* was given twice a day with lukewarm of *Dashmul kwath* for 45 days. Results showed that control group showed significantly greater relief in the subjective parameters then placebo group. However, reduction in the size of the prostate and in the volume of the post-void residual urine was found much better in the control group.

Key words: benign prostatic hypertrophy, Dashmuladi Compound, Mutraghata, Ashtheela, Mutravahasrotasa,

INTRODUCTION: The Sushruta Samhita[1], one of the prime texts among *Brihatrayee* in Ayurveda, describes 12 types of *Mutraghata*. A*shtheela* is one of them and, in its signs and symptoms as well as in anatomical considerations, it bears a close resemblance to benign prostatic hypertrophy (BPH). Increase in the size of the prostate gland in middle aged and elderly men is termed as Benign Prostatic Hypertrophy[3]. In humans, the prostate lies immediately below the base of the urinary bladder surrounding the proximal portion of the urethra and consists of canals and follicles lined with columnar epithelial cells and surrounded by a fibromuscular stroma consisting of connective tissue and smooth muscle. The prostate contributes to seminal fluid, where its secretions are important in optimizing conditions for fertilization by enhancing the viability of sperm in both male and female reproductive tracts. In all mammals, the prostatic secretions are stored in the acini and released into the urethra, at ejaculation, by contraction of the prostatic (stromal) smooth muscle. Benign Prostatic Hypertrophy (BPH) is a progressive disease that is commonly associated with bothersome lower urinary tract symptoms (LUTS) such as frequent urination, urgency, nocturia, decreased and intermittent force of stream, and the sensation of incomplete bladder emptying.

BPH is a common and progressive clinical disease of ageing men, which may be associated with enlargement of the prostate gland, bothersome LUTS and bladder Outlet obstruction (BOO). A survey of WHO reveals that, above the age of 50 years, 50% peoples are suffering from BPH. BPH is as high as 50% at the age of 60 years and 90 % at age of 85 years. It is observed that among the men above 80 years 90% show histological evidence of BPH, out of that 81% have BPH related symptoms and 10% suffer from urinary retention[4]. Sexual dysfunction is another common condition in ageing men; the results of the Multinational Survey of the Aging Male also showed that LUTS is an independent risk factor for sexual dysfunction in ageing men. Both of these age-dependent conditions have a measurable effect on overall quality of life (QOL). Thus, LUTS and sexual dysfunction are common and important health concerns of men aged ≥50 years. In modern medicine the management of BPH is either through a surgical approach (e.g., open prostatectomy, transurethral resection of prostate, cryotherapy, etc.) or by conservative treatment using drugs (e.g. chemotherapy, hormonal therapy, etc.). Prostatectomy is the best approach, but it is associated with many problems and complications, e.g., postoperative morbidity, impotence, retrograde ejaculation, etc. The second most acceptable procedure is Transurethral Resection of the Prostate (TURP) which is also not free from complications. The risk of re-operation after TURP is about 15% at 8-10 years. The morbidity rate after TURP is low (0.5%) [5]. In case of hormonal therapy, although there are some advantages, there are many complications like loss of libido, impotence, gynaecomastia, etc. Generally, the conservative treatments mentioned above have to be continued indefinitely and, therefore, treatment can be expensive. The surgical approach has provided a great deal of relief for many people but, as mentioned earlier, there are many associated problems[6].In this situation, it is possible that Ayurveda will be able to provide a treatment that is natural and free from any adverse effects. Sushruta[1] and other Acharyas have mentioned successful treatment of *Mutraghata* with *Kasaya*, *Kalka*, *Ghrita*, *Kshara*, etc. preparations of different drugs. This research work was carried out with the ultimate aim of finding the best treatment available in Ayurveda for BPH.The Yog Ratnakar, one of the prime texts in Ayurveda, describes 12 types of Mutraghata. Ashtheela (Vatshtheela) is one of them and, in its signs and symptoms; it bears a close resemblance to benign prostatic hypertrophy (BPH). Yog Ratnakar[2] described Dashmuladi compound for the treatment of Ashtheela (Vatshtheela) under mutraghat chikitsa.

AIMS & OBJECTIVES:

Primary Objective: To evaluate the role of *Dashmuladi compound* in the management of A*stheela,* with special reference to BPH.

Secondary Objective: To assess the clinical safety of *Dashmuladi compound* in the management of A*stheela,* with special reference to BPH.

MATERIALS AND METHODS:

Selection of Patients: Total 20 male patients having signs and symptoms of A*shtheela* / BPH, were selected randomly and divided equally into two groups (10 patients in placebo and 10 patients in trial group) from those attending the OPD and IPD of National Institute of Ayurveda,

Jaipur (Raj.) in 1998-99, irrespective of religion, occupation, caste, etc. This clinical trial was approved by Institutional Ethical Committee of NIA, Jaipur.

Inclusion criteria:

- Male patients in the age range of 40-80 years
- Patients having signs and symptoms of *Vatastheela* / BPH

Exclusion criteria:

- Patients below 40 years and above the 80 years of age
- Patients having systemic diseases like tuberculosis, hypertension, renal failure, diabetes mellitus, urinary calculi, carcinoma prostate etc.

Diagnostic Criteria: Diagnosis was based on the clinical signs and symptoms of the disease, which was collected using a specially prepared proforma. We used subjective parameters based on International Prostate Symptoms Score and objective parameters (e.g., size of the gland, post voidal residual urine.) for diagnosis.

Drugs tested :*Dashmuladi kwath and Suddha Shilajit capsule* was prepared and tested by the standard method described in Yog Ratnakar and other classical Ayurvedic texts.

Clinical Study Design: Total 20 male patients having signs and symptoms of A*shtheela* / BPH were selected randomly for the study. The patients were equally divided into two groups and treated as per the schedule given below: Placebo capsules, 500 mg BD orally with lukewarm water before meals, for 45 days. Group B: *Shuddha Shilajit* Capsule 500 mg BD orally with *Dashmul kwath* before meals, for 45 days.

Assessment Criteria:

Subjective criteria:

a. Improvement in the symptoms of the disease was assessed using the International Prostate Symptom Score sheet (of the American Urologists Association).

Objective criteria:

a. Prostatic size as assessed by per rectal digital examination and ultrasonographic study

b. Assessment of residual urine volume

c. Laboratory investigations

Overall assessment criteria:

1. No improvement - 00-25%
2. Mild improvement - 26-50%
3. Moderate improvement - 51-75%
4. Marked improvement - 76-99%
5. Complete remission - 100%

Table 1:Effect of *Dashmuladi Compound* on subjective and objective parameters:

Sign & Symptoms	Group	B.T. Mean	A.T. Mean	Relief	P value
Hesitancy	A	1.9±0.12	1.6±0.15	15%	<.10
	B	1.8±0.16	0.4±0.14	77.77%	<.001
Burning Micturition	A	1.4±0.07	1.4±0.05	0%	-
	B	0.7±0.09	0.1±0.02	85.71%	<.01
Pain	A	1.6±0.11	1.6±0.13	0%	-
	B	1.2±0.2	0.2±0.05	83.33%	<.001
Retention of urine	A	1.5±0.15	1.2±0.12	20%	<.10
	B	1.5±0.19	0.4±0.02	73.33%	<.001
Frequency of urine	A	14.6±0.30	13.9±0.40	4.7%	<.10
	B	16±0.70	7.5±0.62	53.12%	<.001

Urgency	A	1.9±0.30	1.9±0.32	0%	-
	B	1.6±0.15	0.3±0.03	81.25%	<.001
Strangury	A	1.8±0.22	1.8±0.20	0%	-
	B	1.8±0.20	0.42±0.04	77.77%	<.001
Sonographical grade	A	1.9±0.12	1.9±0.14	0%	-
	B	1.8±0.02	0.7±0.03	61.11%	<.001
Weight of Prostate	A	32.75±1.00	32.75±1.20	0%	-
	B	31.6±1.34	23.94±1.12	24.05%	<.001
Residual Urine	A	86.3±0.80	83±0.66	3.82%	<.10
	B	85.8±2.37	58.2±2.02	32.16%	<.001

DISCUSSION: The disease Astheela (*Vatastheela)*, one of the 13 *Mutraghata* disorders of *Mutravahasrotasa*, can be correlated with BPH on the basis of its *Sthana* (place), which is between *Guda* and *Basti*, and also on the basis of the signs and symptoms. Most of the features of *Astheela* described by Sushruta, such as retention of urine (*Mutrasanga*), pain in suprapubic region, etc., are similar to the symptoms of BPH. To make it more scientific for treatment as well as assessment point of views certain features like age above 40 years, increased frequency of urine, reduced urine flow rate, nocturia, intermittency which are not described by Acharya Sushruta, are necessary. Most of the patients in our study (65%) were from the age-group of 51-70 years, which is to be expected since BPH is a disease related to aging. Maximum individuals were of the Hindu religion, which is due to the predominance of Hindus in this area. Most of the patients reported middle to higher class as their occupation, which is not surprising in this urban region. Most of the patients had had symptoms for 3-5 years. One reason for this long duration is that patients often neglect to seek treatment in the early phase of disease; also, many patients may have tried other forms of treatment before seeking Ayurvedic treatment. Disturbed sleep was found in almost all the patients, which might be due to the increased frequency of micturition at night. Constipation was found in 91.66% of the patients, which might be due to faulty dietary habits such as *Vishamashana*.

A highly significant decrease was observed between before to after intervention in group B in the grade of prostate was found of 0.001. Changes in the weight and residual urine in group B after treatment is highly significant 0.001. The result on the subjective parameters in group B showed a highly significant result with a 'P' value of 0.000. The overall assessment all patients got moderate relief in group B. In group A, i.e., placebo group, no significant relief was found in subjective parameters like frequency of micturition, hesitancy, urgency nocturia dysuria etc. Treatment with *Dashmuladi compound* provided highly significant relief was found in subjective parameters like frequency of micturition, hesitancy, urgency nocturia dysuria etc. *Dashmul kwath* is a *Shothhar* (Anti-inflammatory), *Vaat shamak* (Neurological effects) and *Mutral* (Diuretics). It causes decrease in prostate size, increase urine flow rate and give symptomatic relief. Another probable reason for such relief may be the hormonal effect of the *Shilajit* and Dashmul kwath because both medicines have *Vrishya,*

Vajikaran (Aphrodisiac) and *Mutral* (Diuretics) properties. This hypothesis requires further evaluation.

CONCLUSION: In this study we compared Ayurvedic treatments i.e. Dashmuladi compound with placebo group for BPH, It was found that Dashmuladi compound had better effect on the subjective /objective parameters, whereas *placebo group* showed no effect on both parameters.

ACKNOWLEDGEMENT: The author expresses sincere thanks to the Director and HOD Shalya Tantra National Institute of Ayurveda Jaipur for providing financial and Technical support for this programme. I am very thankful to the Director General, CCRAS, New Delhi and In-charge of NRIASHRD, Gwalior for their best co-operation.

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Corresponding Author: Dr. P. L. Bharati, Research Officer –Ay. (S-2), National Research Institute for Ayurveda-Siddha Human Resource Development, Aamkho, Gwalior,M.P.India.