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Case Study

EVALUTE THE EFFECT OF TRADITIONAL APPROACH (*BASTI CHIKITSA* AND AYURVEDA FORMULATIONS) IN THE MANAGEMENT OF BENIGN PROSTATE HYPERPLASIA (BPH)

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ABSTRACT

Benign Prostate Hyperplasia (BPH) is defined as the proliferation of prostatic stromal cells, which results in an enlarged Prostate gland. As result the prostatic urethra is compressed, which restricts the flow of urine from the bladder. BPH is a burning senile problem of elderly men, associated with lower urinary tract symptoms such as frequent urination, urgency, nocturia, intermittent force of stream, and the sensation of incomplete bladder emptying, usually seen in after 5th decade. In Ayurveda, *Vatashtheela* disease closely resembles with BPH of modern medicine in its sign and symptoms. It is manifested due to improper function of *Apana Vayu* along with the vitiation of *Kapha* and *Pitta dosha*. In this case study, a patient diagnosed with Benign Prostatic Hyperplasia was treated with a *Dashmoola Kwath Niruha Basti* and *Bala oil Anuvasana Basti* (3:1 ratio in plan) for 30 days and followed by oral administration of *Chandraprabha vati, Varunadi kashayam, Haritaki churna, Amla churna, Haridra churna* and *Amrutadi guggulu* for 3month in follow-up period. After completion of the treatment, changes in the subjective criteria (by IPSS) and changes in the objective criteria (by USG) were recorded. Finally, study concluded that given treatment is found to be highly effective in the management of Benign Prostate Hyperplasia (BPH).

INTRODUCTION

The name Prostate is originally derived from a Greek word 'Prostates' which literally means one who stand in front of ^[1]. The prostate is a male organ that can expand, either benignly or malignantly. Benign enlargement of the prostate (BPH) is defined as stromal and glandular epithelial hyperplasia in the prostate's periurethral transition zone, which surrounds the urethra.BPH arise along with age and the etiology of BPH is closely related to degenerative process ^[2].

Several theories existed about the causes of BPH. Currently the most widely adopted is it correlation with male hormones, especially testosterone.

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In prostate gland testosterone will be converted to De hydro-testosterone (DHT). Then DHT chronically stimulate the Prostate gland to enlarge. Another factor that affects BPH were the background characteristics of the patient including age, family history, obesity, increased cholesterol level, high diet in animal fat, exercise, smoking, alcohol drinking, hyperglycemia and sexual activity ^[3].

BPH is a condition that affects elderly men, with the highest incidence occurring in the fifth and sixth decades of life (41% in the fifth and 39% in the sixth). BPH affects at least 50% of all males aged 40 and older. Numerous investigations in India indicate that the prevalence of BPH varies between 25%, 37%, and 50% for the ages 40-49, 60-69, and 70-79 years, respectively. Worldwide, the prevalence of BPH in men over the age of 50 ranges from 20% to 62% ^[4].

Clinically, BPH manifests as lower urinary tract symptoms (LUTS), which include obstructive (hesitancy, interrupted urine stream, straining to initiate urination, feeling of incomplete bladder emptying, urgency, frequency, and nocturia) and irritative (urgency, frequency, and nocturia) symptoms [5]. Acute urine retention (AUR) is the most prevalent reason for hospital admission, accounting for 16% of all cases, alongside urinary tract infection.

The word *Mutraghata* consists of two separate words i.e., Mutra and Aahata which stand for low urinary output due to obstruction in the passage of urine. Acharva Dalhan had elucidated the construction and location of Paurush Granthi (Prostate Gland) i.e., in Basti mula pradesha^[6]. Vatashtheela is one among Mutraahata (obstructive uropathies) mav be correlated with BPH on the basis of similarity of symptoms. It is manifested due to improper function of *Apana Vavu* along with the vitiation of *Kapha* and *Pitta* dosha. It has been described as group of urinary disorders in which intermittency, weak stream, straining, urgency, frequency, incomplete emptying are found due to deranged function of Vata Dosha, particularly Apana Vata.

Since BPH is not a rapid progressive disease the management of BPH can be achieved by adapting conventional measure and lastly surgical intervention. Prostatectomy i.e., surgical removal of Prostate gland is a golden treatment for BPH but it may lead to many complications like post-operative morbidity, impotence, retrograde ejaculation etc. Apart from that advancing probability for re-operation has been estimated up to 15% of operated cases within 8-10 years. Although administration of conservative modern treatment i.e., hormone therapy has good advantages but it has side effects like loss of libido, impotence, gynecomastia etc. [7].

Hence everybody wants for therapy which will be Non-invasive, cost effective, well tolerated without any side effects. *Basti Chikitsa* is an authentic treatment option for the management of *Mutraghata* along with the *Shamana* therapy drug having *Vata Kapha Shamaka* are to be helpful for reducing the prostate size and improving urinary bladder tone. So, in this case studies *Dashamoola Kwath Niruha Basti* and *Bala oil Anuvasana Basti* for 30 days and followed by oral administration of *Chandraprabha vati*, *Varunadi kashayam, Haritaki churna, Amla churna, Haridra churna* and *Amrutadi guggulu* for 3 months in follow-up period.

AIM AND OBJECTIVES

To evaluate the effect of *Panchkarma* procedure (*Basti karma*) and *Shamana* drug in the management of Benign Prostatic Hyperplasia (BPH).

MATERIALS AND METHODS

Place of study- OPD of department of Panchkarma, Pt.Khushilal Sharma Govt. (Auto) Ayurveda College and Institute, Bhopal, M.P.

Case Report

A 64 year old male patient visited OPD of *Panchkarma* department of Pt. Khushilal Sharma Govt. (Auto) Ayurveda College and Institute, Bhopal, on 03/04/2024 with the complaints of frequency of micturition, incomplete emptying, nocturia and hesitancy. He was having these complaints for the last 6 months. Gradually his routine life got disturbed. The case has been diagnosed as *Vatashtheela* (BPH) by investigations (sonography) along with as per as sign and symptoms.

History of Present Illness

Patient was asymptomatic for any urinary complaint before 1 year. Since October 2023, patient started to notice increased frequency of urine, urgency, nocturia and sensation of incomplete bladder emptying. Then he had confirmed diagnosis for enlarged prostate measuring and weighing 68gm by USG scan on 06/04/2024. Patient didn't want to go for any allopathic treatment, so he came to *Panchkarma* OPD at Pt. Khushilal Sharma Govt (Auto) Ayurveda College and Institute, Bhopal, for Ayurvedic management.

History of Past Illness

There was no any relevant history. He was a non-smoker, he had no history of Hypertension and Diabetes. He had no known history of allergy to any drug.

Personal History

Appetite – Normal

- Bowel Constipated
- Bladder Frequent

Sleep – Less

Addiction – Nil

Family History

There was no significant family history found for such complaint.

General Examination

Pulse rate – 78 beats /min

Blood pressure – 140/90 mm of hg

Temperature – 98.4°F

Systemic Examination

Cardiovascular system- NAD

- Respiratory system NAD
- Nervous system- NAD

Per Abdomen – Bladder distended, liver, kidney and spleen not palpable

USG – Prostate gland enlarged (grade 3) in size, 68gms with mild cystitis

Assessment Criteria

Subjective criteria

The American Urologist Association International Prostate Symptom Score (IPSS) was used to assess the improvement in symptoms^[8]. The patient was assessed on every 1 month interval to evaluate the IPSS score after 3 months.

Table 1: International Prostate Symptoms Scoring						
Symptoms	Not at all	Less than 1 in 5 times	Less than half the time	About half the time	More than half the time	Almost always
Incomplete emptying of bladder	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
	None	1 time	2 times	3 times	4 times	5 times

Score: Mild: 1-7, Moderate: 8-19, Sever: 20-35

Objective Criteria

USG

S. no	Procedure	Duration	Drug	Dose	Time	Anupana
1.	Basti karma	1-30 days	Niruha Basti- Dashmoola	480 ml	Empty stomach in	
		(Karma	Kwath		the morning	
		<i>Basti</i> plan)	Anuvasana Basti - Bala oil	100ml	After meal	
2.	Shamana drug	3 months	1)Amala+Haldi+ Amrutadi guggulu	5gm bid	Before meal	Lukewarm water
			2)Chandraprabha vati	2tab bid	Before meal	Lukewarm water
			3)Varunadi kashayam	20 ml bid	After meal	Water
			4) Haritaki churna	5gm	At bed time (night)	Lukewarm water
ESULT						

Table 3: (IPSS) Improvement in subjective parameter

Assessment Particulars	1 st month	2 nd month	3 rd month
Incomplete emptying	SHDHAM	2	0
Frequency	4	2	0
Intermittency	3	2	1
Urgency	3	2	0
Weak stream	1	1	0
Straining	1	1	0
Nocturia	3	2	1
Total score	18	12	2

USG Finding

Table 4: Improvement in USG finding

Table 4. Improvement in 050 manig				
Prostate gland enlargement	06/04/2024	26/05/2024	03/07/2024	
in size and weight				
	68gm	26gm	15.8gm	
	Grade - 3	Grade - 1	Normal	

DISSCUSSION

Benign prostate hyperplasia is one of the most common urological disease affecting millions of men worldwide. The global prevalence of BPH is predicted to be 26.2%, with 14.8% in younger males aged 40 and 36.8% in males aged 80 and above^[9]. Acharya Sushruta describes 12type of Mutraghata, Vatashtheela vyadhi,

which is a type of Mutraghata may have some similarity with benign prostate hyperplasia on the basis of symptoms like Achala unnata granthi (singly movable and elevated swelling), Vinmutranilasanga (retention of urine, faeces and flatus), Bastiadhmana (distention of urinary bladder), Vedanachaparabastou

(pain in bladder during excretion). In *Vatashtheela* the predominant feature is 'Vibandha' or 'Avarodha'. According to Acharva Dalhana Vata is the main factor in the pathogenesis of Mutraghata. Basti is considered the most appropriate treatment for as Vata predominant disease, *Mutraghata* is an entity in which vitiation of Vata Dosha takes place. Basti acts specifically on the Pakvashaya and Vata doshas, resulting in Vata shamana and Samprapti vighatana, which can be recognized as decreased symptomatology.

The ingredients of *Dashmoola Kwath* have *Vata-Kapha* with *Pittashamaka* property. Because of this, *sanga* is evacuated from *Mootravaha srotasa*, especially at *Bastishira*, resulting in a reduction in the size of the enlarged prostate. *Dashmool Kwath* have potential anti-inflammatory with analgesic effect as per reviewed of studies done which has been well documented by *Acharya Charaka* ^[10]. In *Basti* therapy *Anuvasana Basti* is indicated when *Vata* is vitiated with the involvement of *Kapha* and *Pitta Dosha* and the pathology is localized in the *Basti Pradesh. Mutraghata* is manifested due to improper function of *Apana Vayu* along with the vitiation of *Kapha* and *Pitta dosha*.

The properties of *Bala oil* such as muscle tone building. rejuvenation, anti-inflammatory and antioxidant properties to control the proliferation of the Prostate gland. Atibala which has Madhura, Snigdha, Sita, Rasavana, Balva and Vatahara qualities and an important ingredient of *Bala taila*, helps in the normalization of Vata Dosha. Therefore Apana Vata dysfunction may have been corrected. Atibala seeds are used to treat chronic cystitis, while its bark and leaves are diuretics in nature. As a result, it is clear that Bala taila may have helped enhance bladder function by improving bladder tone and decreasing the size of the prostate gland [11].

Chandraprabha vati - *Chandraprabha vati* helps in the pacification of *Vata, Pitta, Kapha* indicated in all types of *Prameha, Mutrakrichachta, Mutraghata, Ashmari, Pandu, Antravridhi* etc. It reduces urinary discomfort, frequency of micturition, nocturia etc. Its main ingredients are Purified *Shilajit*, Purified *Guggulu, Kapoor, Musta, Guduchi, Daruharidra* etc. *Chandraprabha vati* has anti-inflammatory activity by inhibition of COX and prostaglanding mechanism in BPH^[12].

Varunadi Kashayam- The decoction of bark skin or root in beneficial in urinary calculi, dysuria and cystitis. Decoction of *Varuna* increases the force of contraction and reduces the volume of post void residual urine (PVRU) in patient with prostatic hypertrophy. It possesses 5-@-reductase inhibitory and @-adreno receptor antagonist activity. Inhibiting 5-@ reductase prevents testosterone from being converted to dihydrotestosterone, the main hormone in prostatic cells that causes BPH ^[13].

Amla- Amalaki is well known as a good anti-oxidant having anti-inflammatory as well as anti-proliferative activity due to the presence of pyrogllol and gallic acid. This drug is used against prostate enlargement ^[14].

Haridra- Haridra Because it has Katu rasa, Ushna virya, and Laghu, Rukasha guna can be used as Lekhaniva dravva, which can help remove adenofibromyoma or glandular parts in BPH. Several published studies have also found that Haridra suppresses the growth of various types of cancer cells. Haridra is useful at reducing inflammation and improving wound healing. It has a variety of applications, including antioxidant, antibacterial, antiinflammatory, antifungal, antiallergenic, antiseptic, and blood cleansing [15].

Amrutadi Guggulu- Amrutadi Guggulu having antiobesity, immunomodulatory, prokinetic, hypolipidemic, thermogenesis property. In Ayurveda, the major goal of disease treatment is to restore the balance of *Doshas*. Properties like *Srotoshodhana, Vata shamana, Lekhana* as well as *Meda vilayana* will be beneficial in BPH. So *Amritadi Guggulu* is beneficial in the treatment of BPH ^[16].

Haritaki Churna- Haritaki is Panchrasatmaka having Kashaya, Tikta, Madhura, Katu, Amla Rasa. By Prabhava it is Tridoshashamaka especially Vatashamaka because it has Madhura Vipaka. Kaphashamaka because it contains Laghu, Ruksha guna, and Ushna veerya. in Rogaghnata is found Vatavyadhi, Shotha, Mutraghata, Yakritpleehavridhi, Prameha, Mutrakruchata, Ashmari, and other places. The effect of Haritaki's 70% methanolic fruit extract on the growth of different malignant cell lines, including a human prostate cell line (PNT1A), was investigated utilizing proliferation, cell viability, and cell death assays. In all cell lines tested, the extract reduced cell viability, inhibited cell growth, and caused cell death in a dosedependent manner. It helps to reduce the signs and symptoms of BPH [17].

CONCLUSION

This single case study concluded that the Benign Prostate Hyperplasia (BPH) can be best treated with Ayurvedic formulations as mentioned. The best treatment in the geriatric age is *Basti Chikitsa* used in this research study shown the marked improvement in the BPH. After completion of the treatment (*Panchkarma* modality followed by oral medication in follow-up period), significant relief was observed in all subjective and objective parameter. Prostate size and weight were reduced from 68gm to 15.8gm. In IPSS Score, there was relief in incomplete emptying, frequency, urgency, intermittency, straining, weak stream and nocturia along with improvement in the quality of life. Finally, study concluded that given treatment is found to be highly effective in the management of BPH. So, this treatment can be used in a greater number of patients so that this can be used as a treatment modality for BPH patient and to prevent the complications of surgery and allopathic medicine.

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