

An Ayurvedic Approach to Benign Prostatic Hypertrophy: A single patient study

Review Article

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Abstract

Benign prostatic hypertrophy is benign enlargement of adenomatous part of prostate gland. It is present in patient in the 5th or 6th decade of the lives due to changes in the hormonal patterns in adult males chronic cripples the day to day activities. This is a case report of a 55 year male patient who presented with increased frequency of urination since past 5 months. Considering the symptom complex the case was diagnosed as a case of *Vata astheela*. The a course of ayurvedic medication such as *Chandraprabha vati*, *Mustadi kalpa* as internal medicine and lifestyle changes were advised for 4 months followed by a review after 7 months. The patient was also scored on measuring guidelines of which were seen to be promising.

Keywords: Adenomatous, *Chandraprabha Vati*, *Mustadi Kalpa*, *Vata Astheela*.

Introduction

Benign prostatic hypertrophy(BPH) is benign enlargement of adenomatous part of prostate gland. Symptoms of which include urinary frequency urgency hesitancy nocturia and incomplete emptying terminal dribbling and overflow or urge incontinence and complete urinary retention (1).

A remarkable new phenomenon is occurring through the world: old agers are becoming far more common. In most countries, the fastest growing age group is the oldest. Over the years, the occurrence of BPH and number of men seeking treatment for the condition are increasing. (2) BPH can be considered as a progressive disease. The treatment of BPH has begun to deviate from surgical to medical management for patients with mild to moderate symptoms, because of much advancement in the pharmacological management of the disease. (3)

According to Ayurveda *Basti* (urinary bladder) is the region where all the mooltra roga occur: eg- *Mootraghata*, *Prameha*, *Shukradosha*, *Mootradosha* and other diseases (4). Among the 12 mooltraghata where retention of urine is the cardinal feature, *vatashtila/mootrashtila* is considered in the context of BPH, as the nature of the pathology in both the conditions is similar: obstruction to the outflow of urine in *Vaatashtila* is due to an *ashtilavat granthi* (stony nodule), and in BPH, due to an enlarged, firm prostate. Ayurvedic pathophysiology describes that vitiated a type of vata (*Apaana Vata*), which localises in between

basti and *shakrut marga* (guda – the ano-rectum), produces a firm, stone-like growth. The growth in turn produces obstruction to passage of *vit*, *mooltra* and *anila*, causing *adhmana of basti* and pain in the region of *basti*. (5)

Table 1: Dosha dushya in Vata astheela

Dosha	<i>Vata(apana) predominant tridoshas.</i>
Dushya	<i>Rasa, Rakta. Kleda, Sveda, Mutra</i>
Agni (digestive power)	<i>Jatharagni mandhya</i>
Udbhava sthana	<i>Kostha</i>
Adhithana	<i>Basti</i>
Srotas	<i>Mutravaha</i>
Srotodusti prakara	<i>Sanga, Vimarga-gamana. Sira, granthi</i>
Roga Marga	<i>Madhyma</i>
Vyaktha	During the act of micturition.

Patient information

A 57 year old male patient presented to OPD of Ayurved hospital with complaints in weak stream and dribbling of urine with nocturia on 10/12/2021 . The patient already had undergone modern medical management and found only minimal relief. A detailed history taking was taken followed by clinical examination. A per rectal examination also confirmed the diagnosis of Benign prostatic hypertrophy. The patient was asked as per IPSS (International Prostatic Scoring scale) (6) to asses his symptoms. The patient was advised dietary and lifestyle changes along with medication for a span of 90 days. The clinical examination details are as follows.

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Clinical findings

Inspection

External urethral meatus appears normal in the case on inspection. No other gross deformity of the urethral opening was found (hypospadias). Foreskin was found to be normal and was fully retractable. As per patient information there was dribbling and weak stream of urine.

Palpation: No strictures were felt in the penile urethra

Per rectal examination

Per rectal examination and bimanual palpation confirmed medial lobe enlargement with a uniform soft swelling abutting the finger. Median ridge was not felt on per rectal examination.

Diagnostic Assessment

The patient was asked to fill the IPSS (International Prostatic Scoring scale) (6) to assess his symptoms.

Results

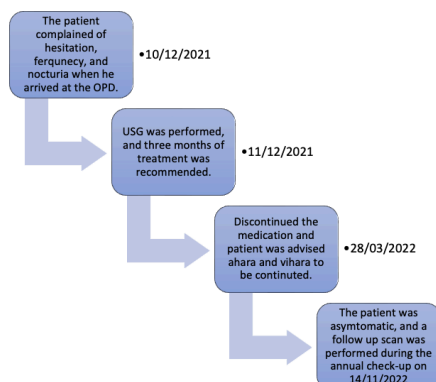
Table 2: International Prostatic Scoring Scale

Incomplete emptying	Before treatment (12.11.2021)	After treatment (14.11.2022)
Frequency	4	2
Urgency	4	2
Hesitancy	3	2
Weak stream	3	1
Straining	2	1
Nocturia	4	1
	20	10

It is evident that due to the a management of 3 months and with Lifestyle modification the patient showed a considerable production in the symptoms. The patient was asked to continue the non pharmacological management for another long time. The complaints of noturia during the course of medical management only. The symptoms above is again divided in two as obstructive and Irritative. The obstructive group comprise weak stream, dribbling and hesitancy while irritative symptoms are frequency, urgency and nocturia. There has been a significant reduction in the scoring of irritating signs in as per scoring.

Timeline of Intervention

Figure 1: Timeline



Intervention

The intervention in case of a BPH may be divided into two points

- *Dravya chikitsa* (medicinal regimes) (7)
- *Viharaja chikitsa* (non medicinal regimes)

Dravya chikitsa (Medicinal regimes)

Table 3: Drug and dosage

Drug	Dosage
<i>Tab. Chandraprabha vati</i>	250 mg tablet thrice daily after food for 3 months
<i>Mustadi kalpa</i>	1 tsp twice daily after food for a span of 3 month

Chandraprabha vati (8)

Chandraprabha vati, *Shilajathu* well known for its *Rasayana* and *Vayasthapana* action is better in the disease related to old age. The properties like *Medhohara*, *Krimigna*, *Kaphahara* and *Lekhana* will help in minimizing the symptoms caused due to obstruction by a mass.

Amayika prayoga: *Mutraghata*, *Mutrasthila*, *Ashmari*, *Mutrakrucchra* etc.

Dosage: 1 karsha

Anupana: Jala (warm)

Mustadi Kalpa (9)

In *Mustadi kalpa* most of the drugs have *Kashaya* and *Tikta rasa*, *Ushna Veerya*, *Madhura Vipaka* and *Kapha Vata Shamaka*. *Mustadi kalpa* is told in the context of *Mootraghata chikitsa* and it acts by the property of *Vyadhi hara*.

Amayika prayoga : *Mutraghata*, *Mutrasthila*, *Ashmari*, *Mutrakrucchra* etc.

Dosa : 1 karsha

Anupana : Jala (warm).

In combination *Chandraprabha vati* and *Mustadi kalpa* acts by *Rasayana*, *Shothagna*, *Lekhana*, *Tridoshaghna* and *Vyadhihara* property.

Viharaja chikitsa (Non medicinal regimes)

The patient was also advised to follow the following viharas (habits and exercises) on a daily basis.

- Patient was encouraged to have double voiding before sleeping
- Was advised not to take alcohol or caffeine containing foods and dark chocolate specially in the 3 hours before sleep
- Also asked to minimise fluid intake after 7pm in the evening
- Was also advised undergo *mooladhara bandha* techniques to increase pelvic floor tone.

Figure 1

S. No: 4067 Ref. By:
Dr. RUBINA

USG OF ABDOMEN / PELVIS

OBSERVATIONS: Date: 11.12.2021

Hepatobiliary System:
The liver is normal in size and shows mild increased parenchymal echogenicity. No obvious focal parenchymal lesion or intra hepatic biliary duct dilatation. Portal vein and CBD shows normal course and calibre.
Gall bladder is well distended. No obvious wall thickening / intraluminal calculus / growth seen.

Spleen and Pancreas:
Spleen is normal in size and echogenicity. No focal lesion noted. Pancreas shows normal size and echogenicity. There is no evidence of focal mass, calcification, calculus or duct dilatation.

Kidneys:
Right kidney is normal in size measures ~116x46mm (parenchymal thickness ~20mm), shape and orientation. Normal echogenicity with normal corticomedullary differentiation noted. No renal calculus / hydronephrosis.
Left kidney is normal in size measures ~114x48mm (parenchymal thickness ~20mm), shape and orientation. Normal echogenicity with normal corticomedullary differentiation noted. No renal calculus / hydronephrosis.

Pelvic Structures: Urinary bladder is well distended, No wall thickening/intraluminal echoes.
Pre void volume - 520cc.
1st Post void volume - 375cc.
2nd Post void volume - 230cc.

Prostate: Is enlarged in size (volume - 38cc) with median lobe hypertrophy indenting bladder base.

Others: No ascites seen. No obvious bowel wall thickening noted.
No evidence of obvious defect in bilateral inguinal region.

IMPRESSION:

- Prostatomegaly with median lobe hypertrophy and significant post void residue.
- Grade I fatty liver.

* Advised clinical correlation.

DR.
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RADIOLOGIST

Figure 2

Tesla Diagnostics
Helps to lead a Quality Life

Name:	Age / Sex	55/Y/M
Refer by Dr :	Date :	14-11-2022
Id.No : SUC140312		

ULTRASOUND WHOLE ABDOMEN

LIVER: Liver is normal in size (14.7cms) with increased echotexture. No focal lesions are noted. The intrahepatic biliary and portal radicals are normal. Portal vein is normal in caliber.

GALL BLADDER: Gall bladder is physiologically distended. No evidence of calculus or pericholecystic fluid. Wall thickness is normal. CBD is normal in caliber.

SPLEEN: Normal in size (8.7cms) and echotexture. No focal lesion seen.

PANCREAS: Visualized part of pancreas is normal in shape, size and echotexture.

RIGHT KIDNEY: 104x39mm, Normal in size and echotexture. Cortico-medullary differentiation is maintained. Pelvicalyceal system is normal. No evidence of calculus.

LEFT KIDNEY: 108x49mm, Normal in size and echotexture. Cortico-medullary differentiation is maintained. Pelvicalyceal system is normal. No evidence of calculus.

URINARY BLADDER: is well distended. Wall thickness is within normal limits.
Pre void: 391cc.
Post void : 70cc

PROSTATE: Enlarged in size (40cc) with normal echotexture. No focal lesion seen.

No evidence of free fluid in abdomen and pelvis. No para aortic lymphadenopathy noted.

IMPRESSION:

- Grade I fatty liver.
- Grade II prostatomegaly.

Suggested clinical correlation

DR. DIVYA C
CONSULTANT RADIOLOGIST

Discussion

There are so many medicaments explained in our classics as; *Kashaya, Kalka, Sarpi, Lehya, Peya, Kshara, Madhya, Aasava, Swedana, Basti, Uttara basti* and *Ashmari hara chikitsa*, and also *Mutra udavarthahara chikitsa*. Thus, it is the medical management with various forms of formulations and in this study the drugs *chandraprabha vati* and *Mustadi kalpa* are in the form of *vati* and *churna* respectively taken.

In *Chandraprabha vati*, *Guggulu* that is known for *Shothagna Lekhana* and *Krimigna* helps to relieve obstructive symptoms and reduction in mass, which is already a proven anti inflammatory drug. *Swarnamakshika* known for *Mootrakricha* improves the bladder tone. *Ksharas* does act as alkalisers helps in reducing urine pH and controls the UTI. *Lavana* has *Shothagna* and *Lekhana* property, reduces the prostate size. Complimented action of herbal drugs will contribute further for the action of *Chandraprabhavati* is having *Vaatashaamaka* and *Rasayana* properties.

These properties may help in enhancing the evacuation ability of bladder.

In *Mustadi kalpa* most of the drugs have *Kashaya* and *Tikta rasa, Ushna Veerya, Madhura Vipaka* and *Kapha Vata Shamaka*.

The *vihraja* management like avoiding caffeinated drink 3 hrs before sleep reduces the diuretic drive. Also alcohol as a known diuretic needs to be avoided.

With double voiding where the patient should voluntarily try to screenshot access amount of urine from his bladder. This significantly reduces the chances of post voidal urine to become stale and cause secondary infection inside the patient which further aggravates complain increase frequency of maturation.

The reduction of post voidal urine gave significant relief to the patient from the

Patient was advise to have no Fluids orally so that there is no diuretic potential in the Kidney during the sleeping hours.

Exercise like *Mooladhara bandha* (10) was advise to the patient to increase the tone of the muscles in the

perium by which features of hesitancy and urgency can be controlled.

The patient under went medical management for a span of 3 months following which the patient only practised mooladhara bandha as per protocols taught in during OPD visitation.

Technique 1

Stage 1:

- Sit in a comfortable meditative asana, preferably siddha/siddha yoni asana, so that pressure is applied to the perineal vaginal region.
- Close the eyes and relax the whole body.
- Be aware of the natural breath.
- Focus the awareness on the perineal vaginal region. Contract this region by pulling up on the muscles of the pelvic floor and then relaxing them.
- Continue to briefly contract and relax the perineal vaginal region as rhythmically and evenly as possible.
- Breathe normally throughout the practice.

Stage 2:

- Continue to breathe normally; do not hold the breath. Slowly contract the perineal vaginal region and hold the contraction.
- Be totally aware of the physical sensation.
- Contract a little tighter, but keep the rest of the body relaxed.
- Contract only those muscles related to the mooladhara region.
- In the beginning the anal and urinary sphincters will also contract, but as greater awareness and control is developed, this will minimise and eventually cease. Ultimately, only one point of contraction will be felt.
- Relax the muscles slowly and evenly.
- Adjust the tension in the spine to help focus on the point of contraction.
- Repeat 10 times with maximum contraction and total relaxation.

Technique 2 (with internal breath retention and jalandhara bandha)

- Close the eyes and relax the whole body for a few minutes.
- Inhale deeply, retain the breath inside and perform jalandhara bandha.
- Perform moola bandha and hold the contraction as tightly as possible. Do not strain.
- This is the final lock.
- Hold the contraction for as long as the breath can comfortably be retained.
- Slowly release moola bandha, then jalandhara, raising the head to the upright position, and exhale.
- Practise up to 10 times.

Breathing pattern while doing Moola Bandha – Perineum contraction

- The above practice may also be performed with external breath retention.

Awareness

- **Physical** – at the point of perineal contraction.
- **Spiritual** – on mooladhara chakra.

Sequence

- Moola bandha is ideally performed in conjunction with *mudras, bandhas and pranayamas*. If practised on its own, it should be performed after asanas and *pranayamas* and before meditation.

Precautions of doing Moola Bandha – Perineum contraction

- This practice should only be performed under the guidance of a competent teacher.
- Moola bandha raises the energy, and may precipitate hyperactivity.
- Do not practice during menstruation.

Moola Bandha (Perineum contraction) Benefits

- Moola bandha bestows many physical, mental and spiritual benefits.
- It stimulates the pelvic nerves and tones the urogenital and excretory systems.
- It is helpful in psychosomatic and degenerative illnesses.
- It relieves depression and promotes good health.
- It helps to realign the physical, mental and psychic bodies in preparation for spiritual awakening.
- Moola bandha is a means to attain sexual control. It may be used to sublimate sexual energy for spiritual develop meant (brahmacharya), or for enhancement of marital relations.

Practice note

- Moola bandha is the contraction of specific muscles in the pelvic floor, not the whole perineum. In the male body, the area of contraction is between the anus and the testes.
- In the female body, the point of contraction is behind the cervix, where the uterus projects into the vagina.
- On the subtle level, it is the energising of mooladhara chakra. The perineal body, which is the convergence of many muscles in the groin, acts as a trigger point for the location of mooladhara chakra. Initially, this area is difficult to isolate, so it is recommended that *Ashwini* and *vajroli mudras* be performed in preparation for *moola bandha*.
- The Sanskrit word moola means 'root', 'finally fixed', 'source' or 'cause'. In this context it refers to the root of the spine or the perineum where mooladhara chakra, the seat of kundalini, the primal energy, is located. Moola bandha is effective for locating and awakening mooladhara chakra.(11)

Outcome and Conclusion

Significant reduction in post voided urination made the patient feel batter form his complaint of nocturia. The patient was advised medication for 3 month and has no remission for now, hence this modality can be considered as a treatment cases of benign prostrate hypertrophy. This case study proves that medication and dietary management can be helpful to reduce symptoms of BPH. The patient in this case has taken medication for 3 months after which patient was unable to continue medication despite having relief.

The patient was hence advised non medical management of fluid restriction and double voiding.

The patient by himself continued regimes of mooladhara bandha for a year. During the entire course the patient never had an episode of Lower Urinary tract infection. The patient also didn't have any active complaints of BPH. The effect of the reduction of size of prostate cannot be completely transposed on medical management. During the initial days medical management may have reduced the symptoms but it seems that the yogic practice and non medical management made the disease well under control for a span of 9 months without medication. This case demonstrates the significance of yogic practices in management of a disease that is known to cause misery in elderly male population.

Patient consent

Informed consent was obtained from the patient for publication of this case report and any accompanying images are made available for verification by the editor of the journal.

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