Original Research Paper

Volume - 15 | Issue - 08 | August - 2025 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Ayurveda

MANAGEMENT OF BENIGN PROSTATIC HYPERPLASIA WITH ELEVATED PROSTATE-SPECIFIC ANTIGEN WITH AYURVEDA: A CARE-COMPLIANT CASE REPORT

Dr Poona Nath Chouhan*

Assistant Professor, Department of Shalya Tantra, Nootan Ayurvedic College and Research Centre Sankalchand Patel University Visnagar, Gujarat. *Corresponding Author

ABSTRACT **Background:** Benign prostatic hyperplasia (BPH) is common in older men and can be accompanied by elevated prostate-specific antigen (PSA) levels and troublesome lower urinary tract symptoms. Traditional therapies and Ayurvedic treatment options are available. This case report describes the successful treatment of BPH with elevated PSA levels using a standardized Ayurvedic treatment protocol. **Case Presentation:** A 65-year-old male presented with urinary difficulties that he had been experiencing for the last six years, including increased urinary frequency (10-12 times/day), weak urinary stream, nocturia (2-3 times/night), and occasional dribbling. He had undergone partial prostatectomy and bilateral orchidectomy five months prior. Ultrasound showed a 40cc prostate with significant post-void residual (40cc) and PSA had elevated to 7.3 ng/mL. The patient was treated using a complete Ayurvedic protocol. The protocol included *Varunaadi Kwatha* (10mL 2 times daily), *Kanchnaar Guggulu* (2 tablets 3 times daily), *Chandraprabha Vati* (2 tablets 2 times daily), and *Shilajtvadi Vati* (1 tablet 2 times daily), in addition to *Uttarbasti* (urethral installation) using *Bala Taila*. **Outcomes:** At three months of therapy, the patient demonstrated clinically significant improvements in each clinical measure. The patient's urinary frequency from approximately 10-15 times per day to 5-6 times per day, nocturia from approximately 3-4 times per night to 1-2 times per night, urinary stream was normalized, and he experienced no dribbling. The most important measure, urologist's handwritten PSA levels, decreased from 7.3 ng/mL to 0.40 ng/mL (significance levels unknown). Six months after the completion of therapy, the patient was asymptomatic and was not taking any medications. **Conclusion:** This case suggests that standardized Ayurvedic treatment for elevated PSA levels associated with BPH is efficacious. Given the significant clinical and biochemical improvements observed, Ayurvedic medicine may be a therapeutic option for men with BPH. Larger and more controlled research studies are needed to extend generalizability and long-term safety.

KEYWORDS : Benign prostatic hyperplasia, Ayurveda, prostate-specific antigen, *Varunaadi Kwatha, Kanchnaar Guggulu, Chandraprabha Vati, Uttarbasti*

INTRODUCTION

Benign prostatic hyperplasia (BPH) is one of the most prevalent urological diseases affecting older men, with prevalence rates significantly rising after age 40 years, and estimated between 8-60% at age 90 years. BPH is defined by non-cancerous enlargement of the prostate gland, which causes lower urinary tract symptoms (LUTS) associated with increased urinary frequency, nocturia, weak urinary stream, urgency, and incomplete voiding of the bladder. These symptoms can negatively impact health-related quality of life and may be linked with increased prostate-specific antigen (PSA) levels, presenting a diagnostic challenge in distinguishing BPH from prostate cancer.

Currently utilized conventional management options for BPH include watchful waiting, pharmacological therapy with alpha-blockers and 5-alpha reductase inhibitors, and surgical treatment options ranging from transurethral resection to newer, minimally invasive surgical techniques.Unfortunately, these treatments are often associated with serious health consequences, high costs, and variable rates of treatment success, which may lead patients to pursue alternate therapeutic interventions.

Ayurveda, a traditional Indian system of medicine, has been used for centuries to treat urogenital diseases. Ayurvedic texts describe conditions resembling Benign Prostatic Hyperplasia under the term "*Mutraghata*," which refers to obstruction of normal urinary flow due to vitiated *Vata Dosha*. Traditional Ayurvedic treatments for *Mutraghata* and BPH consist of multiple herbal formulations and specialized procedures, including *Uttarbasti* (a form of urethral instillation therapy). Some Ayurveda preparations include *Varunaadi Kwatha, Kanchnaar Guggulu* and *Chandraprabha Vati,* all used in the treatment of prostate-related disorders though scientific documentation in this area is limited.Recent systematic reviews have summarized some early evidence supporting the potential of herbal medicines in the management of BPH, with some studies demonstrating beneficial symptom relief and PSA level reduction[.]However, clinical evidence of herbal remedies, specifically in relation to Ayurveda, is limited. This case report aims to report BPH with elevated PSA levels using a standardized Ayurvedic management protocol while adhering to the CARE (Case Report) guidelines, which encourage "transparent and complete" reporting for case reports.

CASE PRESENTATION

Patient Information

A 65-year-old Indian male from Mahesana, Gujarat, visited our Ayurvedic clinic with the primary concern of worsening lower urinary tract obstruction symptoms. The patient was a retired bank manager from an upper socioeconomic background with no history of smoking or alcohol use. He reported a strict vegetarian diet and no known drug allergy.

Clinical Findings

The patient reported a history of worsening symptoms over 6 years without a previous medical diagnosis or treatment for the disease. The following urinary symptoms developed over 6 years:

- Increased urinary interval: 10-12 times daytime
- Nocturia: 2-3
- Weak urine stream, long voiding time
- Variable post void dribbling
- Sense of incomplete emptying bladder

Physical examination revealed an afebrile patient with normal vital signs. Abdominal examination revealed mild fullness in the suprapubic area. A digital rectal examination was not performed because of the previous surgical history.

Timeline And Diagnostic Assessment

Five months before presentation, the patient underwent bilateral inguinal hernia repair, bilateral orchidectomy, and partial prostatectomy at a conventional medical facility. Postoperative management was as follows:

- Tab Geripod 8mg at bedtime once a day
- Tab Shelcal 500mg at bedtime once a day
- Tab Cetirizine 10mg at bedtime once a day

Following surgical intervention, the patient still experienced significant urinary symptoms, which led him to say he would like to consult with an Ayurvedic practitioner.

DIAGNOSTIC METHODS AND RESULTS

Pelvic ultrasound revealed the following:

- Prostate Size: 40cc (prostate enlargement)
- Bladder volume pre voiding: 240cc
- Post void residual: 40cc (significant)
- Two tiny vesical concretions

Laboratory Findings:

- Overall normal complete blood count
- Prostate- specific antigen (PSA): 7.3 ng/mL (elevated; normal
- Renal function tests: normal

Ayurvedic Assessment

Ayurvedic assessment of the patient was conducted using classical means of assessment of the condition of *Mutraghata* (obstructive uropathy) of primarily *Vata Dosha* vitiation. The patient appeared to have symptoms of *Vatashtheela* (prostate enlargement secondary to *Vata* imbalance) along with *Mutrakrichra* (dysuria) and *Mutrasada* (incomplete emptying of the bladder).

THERAPEUTIC INTERVENTION

Treatment Protocol

A full treatment protocol was outlined based on classical texts and current clinical practice. The intervention was introduced in the following phases:

Phase 1 (Days 1-7): Concurrent Therapy

Ayurvedic medications were commenced while conventional medications were continued to ensure the safety of the patient and that the transition occurred gradually.

Medication	Dosage	Timing	Adjuvant
Varunaadi Kwatha	10 mL	Twice daily	Before meals
Kanchnaar Guggulu	2 tablets	Thrice daily	After meals with lukewarm water
Chandraprabha Vati	2 tablets	Twice daily	Before meals
Shilajtvadi Vati	1 tablet	Twice daily	Before meals

Phase 2 (Days 8-28): Solely Ayurvedic Treatment

After careful monitoring of the patient and with patient consent, conventional medications were tapered down, and the Ayurvedic protocol was continued. In addition, the patient underwent panchakarma therapy.

***Uttarbasti* with *Bala Taila*:** This involved two courses of urethral instillation therapy, each lasting for 1 week, with a 1-week break between each course.

All oral Ayurvedic medications were continued according to the Phase 1 protocol.

Phase 3 (Days 29-90): Maintenance Therapy

The oral Ayurvedic medications were continued at the same dosage for a constant therapeutic effect and to prevent symptom relapse**.**

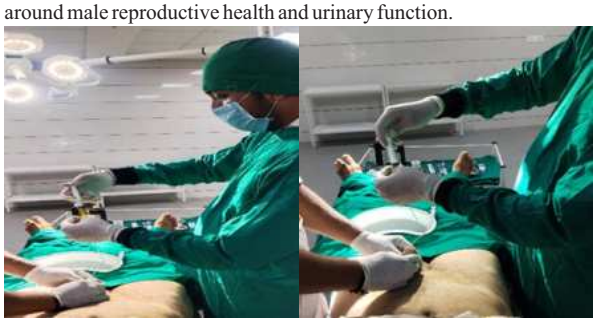
Reasoning For Chosen Interventions

***Varunaadi Kwatha*:** A classic decoction with *Varuna* (*Crataeva nurvala)* as the main ingredient traditionally used for urinary diseases and prostate states. *Varunaadi Kwatha* has diuretic, anti-inflammatory and prostate gland protector properties.

Kanchnaar Guggulu: A compound formulation with *Kanchnaar* (*Bauhinia variegata*) and *Guggulu* (*Commiphora mukul*). It is traditionally indicated for glandular enlargement and infection or inflammatory states. It has anti-inflammatory properties that can also aid in tissue healing.

Chandraprabha Vati: A polyherbal formulation that contains multiple ingredients, including *Shilajatu* (*Asphaltum*), it is traditionally used and best known for genitourinary disease states. It has rejuvenated and urinary antiseptic properties.

Shilajtvadi Vati: Contains *Shilajatu*, as its main ingredient, *Shilajatu's* uniqueness is its adaptogenic and rejuvenate properties, particularly around male reproductive health and urinary function.



Pic 1 – Procedure of Uttar Basti

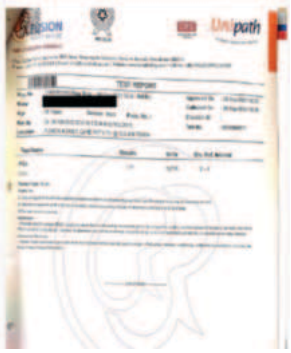
***Uttarbasti* With *Bala Taila*:** A specialized panchakarma process where medicated oil (*Bala Taila*), which is derived from *Bala* (*Sida cordifolia*), is installed through the urethra. *Bala Taila* has anti-inflammatory properties and a property to strengthen the whole body (Pic 1).

FOLLOW-UPAND OUTCOMES

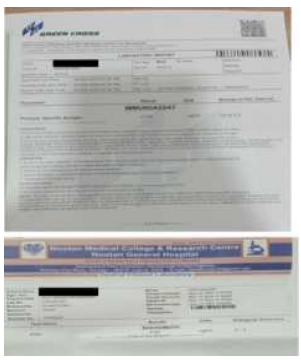
Primary Outcomes

Patient progress was monitored through regular clinical assessment and objective measurements. Significant improvements were observed across all parameters.

Parameter	Before Treatment	After Treatment (3 months)	Percentage Improvement
Daytime urinary frequency	10-12 times/day	5-6 times/day	50-58%
Nocturia	2-3 times/night	1-2 times/night	33-50%
Weak urinary stream	Present	Absent	100%
Post-void dribbling	Occasionally present	Absent	100%
PSA levels	7.3 ng/mL (Picture 2)	0.40 ng/mL (Picture 3)	94.5%



Pic 2 – Before Treatment



Pic 3 After Treatment

Secondary Results

- Other positive effects recorded during the treatment period included the following:
- Improved sleep with nocturia being reduced
- Improved quality of life and lowered anxiety regarding urinary symptoms
- No adverse events or complications during the treatment period
- Total discontinuation of conventional medicines with no recurrence of symptoms

Long-term Follow-up

- The patient underwent 6 months of continuous follow-up after the treatment was concluded.
- Follow-ups were conducted every 30 days.
- Symptomatic relief was sustained without medication
- No recurrence of urinary frequency, nocturia, or dribbling
- Excellent urinary stream with comparatively normal flow (patient was asked to rate their quality of their stream on a scale of 1-10 given the research involved private evaluation of ongoing urinary flow and patient stated having "normal turns" flow)
- Patient indicated at 6 month follow-up that they were "completely relieved"
- No adverse events or complications during the follow-up period

DISCUSSION

This case report presents a comprehensive record of the successful management of BPH with standardized Ayurvedic interventions, with both clinical and biochemical improvements. The effect seen in the PSA levels, from 7.3 ng/mL to 0.40 ng/mL, and full symptom resolution was accompanied by a clinically relevant outcome meaningful enough to warrant further scientific consideration.

Clinical Significance

The reduction in PSA of 94.5% is remarkable, given that elevated PSA levels often persist in patients with BPH despite multiple treatments and may reflect persistent prostatic inflammation or hyperplasia. The change in PSA to a level of 0.40 ng/mL implies that the Ayurvedic interventions likely resulted in anti-inflammatory and tissue-healing effects. It is also worth noting this is consistent with previous studies demonstrating anti-inflammatory abilities of the individual components included in this protocol.,

The total cessation of LUTS, which also includes the resolution of nocturia and dribbling urine episodes, indicates beneficial functional improvements in terms of bladder emptying and prostatic function. The 50-58% reduction in daytime urinary frequency indicates a clinically meaningful improvement as defined by BPH treatment guidelines.

Mechanism of Action

The clinical improvements observed in this case can be attributed to the additive effects of multiple Ayurvedic interventions.

Varunaadi Kwatha*: Crataeva nurvala,* the main ingredient, contains bioactive compounds, mainly lipeol, β-sitosterol, and flavonoids which are anti-inflammatory, diuretic, and prostate-protecting. Previous studies demonstrated its ability to decrease prostate size and improve urinary flow.

Kanchnaar Guggulu: The combination of *Bauhinia variegata* and *Commiphora mukul* produces anti-inflammatory and tissue healing effects. *Guggulsterones*, which are in *Commiphora mukul* have been shown to modulate inflammatory pathways and have anti-proliferative properties.

Chandraprabha Vati: This polyherbal formulation offers numerous ingredients with credible urological benefits. A potential key ingredient is Shilajatu, which has been shown to possess adaptogenic properties and to help improve genitourinary function in clinical studies.

Uttarbasti **Therapy**: Direct administration of medicated oils to the urogenital tract by *Uttarbasti* may provide a localized anti-inflammatory response and healing. The ingredients, such as *BalaTaila*, possess tissue supporting properties temporarily counteracting inflammation.

Comparison To Existing Literature

Systematic reviews conducted in 2022 regarding herbal treatments for BPH suggest beneficial outcomes, albeit the reviews predominantly review single herb approaches rather than comprehensive Ayurvedic approaches. The systematic review by Kumar and Dudhamal in 2022 suggested that several Ayurvedic interventions exist for BPH management, but the studies lacked sufficient quality of clinical documentation. The case report started to provide and fill the gap for clinical information and provide clinical documentation using reporting standards.

Comparatively, studies regarding the outcomes of conventional BPH treatments indicate that alpha-blockers typically improve LUTS by 30% to 40%, while 5-alpha reductase inhibitors reduce PSA levels by 40% to 50% after approximately 6 to 12 months. The improvements achieved in this case surpass the arms of both studies, further supporting the potential greater efficacy of a comprehensive Ayurvedic approach; however, direct comparisons will require a series of evaluated controlled studies.

Safety Considerations

The treatment protocol was well tolerated, as there were no adverse events reported during the 3 months of treatment or the 6-month follow-up. This safety profile is in line with the comfortable safety tolerances demonstrated with the long-term clinical application of these formulations. The approach to weaning off conventional medications also ensured patient safety through monitoring weaning methods, in addition to the objective monitoring of progress, a vital inclusion in this protocol.

Limitations And Considerations

There are several limitations to consider when interpreting these findings**.**

- Single case study format — not generalizable without larger-controlled studies
- Previous surgical intervention — this patient was emerging out of partial prostatectomy, which could influence the treatment response
- Lack of a control group — this makes it difficult to separate the treatment effects from natural disease progression
- Subjective measures — some improvement measures rely on questionnaire/cumulated clinical assessment data with a patient-reported outcome
- Short follow-up — Further follow-up of the long-term durability of the improvements requires an extended monitoring program.

Nonetheless, the structured approach in the medication withdrawal protocol, plus the standardization of objective PSA measurements and ongoing symptom alleviation, reduce the potential for placebo effect and substantiate the efficacy of the treatment items.

Clinical Implications

This case provides evidence that comprehensive Ayurvedic management may be an adjunct or possibly even an alternative to the standard model of BPH care, especially for patients interested in natural therapies or those who are poorly responsive to traditional treatments. When medications in the management of BPH are combined with specific systems of care, such as *Uttarbasti*, it is possible that the benefits will be synergistic or increased compared to single modalities only.

The enormous decrease in PSA levels following this therapy has important implications for clinical practice, principally in offering possible prolonged intervals of monitoring and lessening anxieties associated with increased levels of PSA. However, all patients should be under medical supervision to exclude malignant causes.

Future Research Directions

- Overall, this case report highlights the need for well-designed clinical trials to substantiate such claims. Recommended future research includes the following:
- Randomized controlled trials that compare Ayurvedic protocols with standard therapy
- Dose-response studies of each Ayurvedic formulation
- Studies that investigate long-term safety and efficacy, with extended follow-up
- Mechanistic studies investigating the relevant pathways involved
- Economic evaluations - costs and outcomes of treatment options.

CONCLUSION

This CARE-compliant case report demonstrates how Ayurvedic treatment managed BPH with high PSA levels. The patient experienced significant improvements in his symptoms and laboratory results. His PSA level dropped by 94.5%, and his urinary problems resolved. The treatment did not cause side effects, and the benefits lasted for at least 6 months after the treatment ended, without the need for more medicine. These results are promising and suggest that Ayurvedic treatments may be effective for BPH. However, that this is only one case. This study lays the groundwork for further research. Controlled trials are needed to determine whether these treatments are effective for most people, what the appropriate doses are, and whether they are safe for long-term use. This case adds to the growing evidence that combining different types of medicines might help treat BPH. This shows that traditional medicine could be useful for treating tricky urinary problems.

Competing Interests

The authors declare that there is no personal stakes in this study. Study did not receive money from drug companies or other businesses to conduct this study or to write about it.

Consent To Publish

The patient had given written informed consent for this clinical case report, along with all related clinical information and investigation reports, to be used for the purpose of research publication. The patient

was informed regarding the matter that all personal identifiers or the necessary information would be anonymized to preserve privacy and that his identity would be kept private.

Funding Declaration
Study received no funding

Further Disclosure
The paper has been uploaded to or deposited in a preprint server with DOI - https://doi.org/10.21203/rs.3.rs-7012440/v2

REFERENCES

1. Berry SJ, Coffey DS, Walsh PC, Ewing LL. Development of human benign prostatic hyperplasia with age. J Urol. 1984;132(3):474-479.
2. Roehrborn CG. Benign prostatic hyperplasia: An overview. Rev Urol. 2005;7 Suppl 9:S3-S14.
3. Catalona WJ, Richie JP, Ahmann FR, et al. Comparison of digital rectal examination and serum prostate-specific antigen in the early detection of prostate cancer: results of a multicenter clinical trial of 6,630 men. J Urol. 1994;151(5):1283-1290.
4. McVary KT, Roehrborn CG, Avins AL, et al. Update on the AUA guidelines for the management of benign prostatic hyperplasia. J Urol. 2011;185(5):1793-1803
5. Sharma PV. Sushruta Samhita with English translation of the text and Dalhana's commentary. Varanasi: Chaukhambha Visvabharati; 2001.
6. Shrivastava A, Gupta VB. Various treatment options for benign prostatic hyperplasia: A current update. J Mid-life Health. 2012;3(1):10-19.
7. Kumar N, Dudhamal TS. Ayurvedic Management of Mootraghata (Benign Prostate Hyperplasia): A Systematic Review. International Journal of Ayurveda and Pharma Research. 2022;10(4):1-8
8. Saxena V, Srivastava N, Pandey N. Herbal drugs for benign prostatic hyperplasia (BPH). A current update. Int J Pharm Sci Res. 2020;11(5):2076-2085.
9. Gagnier JJ, Kienle G, Altman DG, et al. The CARE guidelines: Consensus-based clinical case reporting guideline development. J Clin Epidemiol. 2014;67(1):46-51.
10. Deshpande PJ, Sahu M, Kumar P. Crataeva nurvala Hook and Forst (Varuna) – the Ayurvedic drug of choice in urinary disorders. Indian J Med Res. 1982;75:46-50.
11. Sharma V, Agrawal RC. In vivo anti-inflammatory activity of Kanchnaar Guggulu, a polyherbal Ayurvedic formulation. Ayu. 2014;35(1):77-81.
12. Pole S. Ayurvedic Medicine: The Principles of Traditional Practice. London: Churchill Livingstone; 2006
13. Wilson E, Rajamanickam GV, Dubey GP, et al. Review of shilajit used in traditional Indian medicine. J Ethnopharmacol. 2011;136(1):1-9.
14. Sharma AK, Bhatia V, Nagraja N, et al. Contemporary Panchakarma Therapy. New Delhi: Rashtriya Ayurveda Vidyapeeth; 2010.
15. Oesterling JE. Prostate-specific antigen: a critical assessment of the most useful tumor marker for adenocarcinoma of the prostate. J Urol. 1991;145(5):907-923.
16. Gupta M, Mazumder UK, Bhawal SR. CNS activity of Kanchnaar (Bauhinia variegata) leaf extract in mice. Phytother Res. 1999;13(3):245-247.
17. Sarup P, Bala S, Kamboj S. Pharmacology and phytochemistry of oleo-gum resin of Commiphora wightii (Guggulu). Scientifica. 2015;2015:138039.
18. Barry MJ, Fowler FJ Jr, O'Leary MP, et al. American Urological Association symptom index for benign prostatic hyperplasia. J Urol. 1992;148(5):1549-1557.
19. Pathak N, Rai AK, Kumari R, and Bhat KV. Value addition in sesame: A perspective on bioactive components for enhancing utility and profitability. Pharmacogn Rev. 2014;8(16):147-155.
20. Urizar NL, Moore DD. GUGULIPID: a natural cholesterol-lowering agent. Annu Rev Nutr. 2003;23:303-313.
21. Ghosal S. Shilajit in Perspective. Alpha Science International, 2006.
22. Sharma H, Chandola HM, Singh G, Basisht G. Utilization of Ayurveda in health care: an approach for prevention, health promotion, and treatment of disease. J Altern. Complement. Med. 2007;13(9):1011-1019.
23. Sasidharan S, Parameswaran Srinivasakumar K, Aravind Kumar J, et al. Benign prostatic hyperplasia (BPH): A comprehensive analysis of the malaise and summarizing possible management options through phytotherapeutic agents. Heliyon. 2022;8(7):e09984
24. Kumar N, Dudhamal TS. Ayurvedic Management of Mootraghata (Benign Prostate Hyperplasia) – A Systemic Review. Int J Ayurveda Pharma Res. 2022;10(4):1-8.
25. Nickel JC, Gilling P, Tammela TL, et al. Comparison of dutasteride and finasteride for treating benign prostatic hyperplasia: the Enlarged Prostate International Comparator Study (EPICS). BJU Int. 2011;108(3):388-394
26. Garg I, Yadav S. A Case Study on Role of Kanchnaar Guggulu and Chandraprabhavati in the Management of Vatashtheela (BPH). International Journal of Research in Ayurveda & Pharmacy. 2022;13(3):45-49.