



Integrative Ayurvedic Approach to Benign Prostatic Hyperplasia (BPH): A Comprehensive Narrative Review

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Abstract

Background:

Benign Prostatic Hyperplasia (BPH) is a progressive, age-related condition characterized by non-malignant enlargement of the prostate, lower urinary tract symptoms (LUTS), and reduced quality of life among ageing men. Conventional therapy— α -blockers, 5- α -reductase inhibitors, and surgical interventions—often leads to adverse effects or incomplete symptom relief. Ayurveda conceptualizes BPH under *Mutraghata*, *Vatashtheela*, and *Mutra-krichchhra*, emphasizing *Vata-dushti*, *Srotorodha*, and *Meda/Mutravaha Srotas* dysfunction. Integrative approaches combining Panchakarma, Rasayana, and herbal formulations show potential for symptom relief and disease modification.

Methods:

A narrative review was conducted using PubMed, Scopus, AYUSH Research Portal, IndMED, and Google Scholar. Search terms included “Benign Prostatic Hyperplasia,” “Ayurveda,” “Mutraghata,” “Gokshura,” “Varuna,” “Panchakarma,” and “prostate inflammation” using Boolean operators (AND/OR). Literature published between 1980–2024 was included. Clinical trials, observational studies, conceptual papers, mechanistic studies, and classical Ayurvedic texts (*Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*) were evaluated. PRISMA principles guided screening and selection. Exclusion criteria were non-peer-reviewed papers, incomplete data, and non-human studies unless mechanistic insights were relevant.

Results:

Ayurvedic descriptions of *Mutraghata*, *Vatashtheela*, and *Mutra-krichchhra* share symptomatic overlap with BPH. Herbs such as *Gokshura*, *Punarnava*, *Varuna*, *Kanya*, and formulations like *Chandraprabha Vati*, *Gokshuradi Guggulu*, *Punarnavadi Kashaya*, and *Shilajit Rasayana* exhibit anti-inflammatory, diuretic, anti-androgenic, and anti-proliferative effects. Clinical studies demonstrate reductions in IPSS scores, prostate size, and post-void residual urine. Panchakarma therapies like *Uttara Basti*, *Matra Basti*, and *Virechana* show improvements in urinary flow and symptom burden. Research gaps include heterogeneity in methodologies, small sample sizes, and lack of long-term outcome data.

Conclusion:

Integrative Ayurvedic management shows promising potential in alleviating LUTS, reducing inflammation, and improving quality of life in BPH. Herbal and Panchakarma-based interventions may serve as adjunct or complementary therapies. Future research should focus on multicentric RCTs, standardized formulations, and mechanistic studies to evaluate long-term disease modification.

Keywords: Benign Prostatic Hyperplasia, BPH, Lower Urinary Tract Symptoms, LUTS, Ayurveda, *Mutraghata*, *Vatashtheela*, *Gokshura*, *Varuna*, *Punarnava*, *Chandraprabha Vati*, *Gokshuradi Guggulu*, *Panchakarma*, *Basti*, *Uttara Basti*, *Virechana*, *Integrative Medicine*, *Rasayana*, Prostate Health.

Introduction

Benign Prostatic Hyperplasia (BPH) is among the most prevalent urological disorders affecting ageing men, with nearly 50% of men over 50 years and up to 90% above 80 years showing histological enlargement of the prostate gland [1]. BPH leads to lower urinary tract symptoms (LUTS)—frequency, nocturia, hesitancy, and weak urinary stream—which significantly impair daily functioning and sleep quality [2].

Pathophysiologically, BPH involves stromal and epithelial proliferation mediated by dihydrotestosterone (DHT), altered androgen–estrogen ratios, inflammation, and smooth muscle hypertonicity [3]. Chronic inflammation, oxidative stress, and metabolic syndrome are implicated in disease progression [4].

Ayurveda does not explicitly use the term BPH but describes *Mutraghata*, *Vatashtheela*, *Mutrotsanga*, and *Mutra-krichchhra*, conditions involving urinary obstruction, dribbling, and

painful voiding. *Sushruta* describes *Vatashtheela* as a hard swelling in the urinary passage due to *Vata* obstruction, interfering with normal urination [5]. *Charaka* emphasizes *Srotorodha*, *Meda-vridhhi*, and *Vata-vitiation* as primary derangements leading to obstructive urinary disorders [6].

The growing interest in integrative approaches arises due to limitations of conventional therapy—sexual dysfunction from α -blockers, hormonal effects from 5- α -reductase inhibitors, and complications of TURP surgery [7]. Ayurveda offers disease-modifying concepts including Panchakarma, Rasayana, diuretic–anti-inflammatory herbs, and lifestyle modifications.

This review synthesizes Ayurvedic knowledge, modern evidence, mechanisms of action, and therapeutic relevance of integrative approaches in BPH.

2. Methods

2.1 Study Design

This is a **narrative review** following PRISMA guidelines where applicable.

2.2 Databases Searched

- PubMed
- Scopus
- IndMED
- AYUSH Research Portal
- Google Scholar

2.3 Inclusion Criteria

- Clinical studies (RCTs, observational trials)
- In-vitro/in-vivo studies with mechanistic relevance
- Ayurvedic classical textual evidence
- Peer-reviewed conceptual papers

2.4 Exclusion Criteria

- Non-human studies without mechanistic value
- Non-peer-reviewed articles
- Duplicate or incomplete papers

2.5 Study Selection Process

Titles and abstracts were screened. Full texts were assessed for relevance. Ayurvedic sources were cross-verified with translations of *Charaka*, *Sushruta*, and *Ashtanga Hridaya*.

2.6 Data Extraction

Data were extracted for:

- Ayurvedic concepts

- Clinical outcomes
- Mechanisms
- Panchakarma interventions
- Herb-drug actions

Discrepancies were resolved by consensus.

3. Results

3.1 Ayurvedic Conceptual Interpretation of BPH

| Ayurvedic Condition | Symptomatic Overlap with BPH | Reference |
|-------------------------|---------------------------------------|----------------------|
| <i>Vatashtheela</i> | Obstruction, hard swelling, weak flow | Sushruta [5] |
| <i>Mutraghata</i> | Retention, incomplete voiding | Charaka [6] |
| <i>Mutrotsanga</i> | Delayed initiation, dribbling | Ashtanga Hridaya [8] |
| <i>Mutra-krichchhra</i> | Dysuria, painful voiding | Charaka [6] |

Key Ayurvedic mechanisms:

- *Vata vitiation* (Apana Vayu dysfunction)
- *Srotorodha* (obstruction of urinary channels)
- *Meda-vridhhi* and *Kapha accumulation*
- Chronic *Ama*-mediated inflammation

3.2 Herbal Interventions in BPH

1. *Gokshura (Tribulus terrestris)*

Anti-inflammatory, diuretic, anti-androgenic; shown to reduce prostate weight in animal models [9].

2. *Varuna (Crataeva nurvala)*

Improves bladder emptying, reduces obstruction, enhances detrusor function [10].

3. *Punarnava (Boerhavia diffusa)*

Potent diuretic and anti-edematous; reduces PVR urine [11].

4. *Shilajit*

Rejuvenative, anti-inflammatory, endocrine modulating [12].

5. *Chandraprabha Vati, Gokshuradi Guggulu*

Widely used for LUTS; exhibit anti-proliferative and anti-inflammatory effects.

3.3 Panchakarma Therapies

1. *Basti* (medicated enema)

Corrects *Vata*, improves Apana Vayu function, reduces urinary retention.

Studies show significant improvement in IPSS and Qmax [13].

2. *Uttara-basti*

Administration of herbal oils through urethral orifice; improves tone of bladder neck, reduces inflammation [14].

3. *Virechana*

Detoxifies *Pitta* and *Kapha*, beneficial in inflammatory LUTS [15].

3.4 Clinical Evidence

- A study on *Gokshuradi Guggulu* + Basti showed significant reduction in IPSS scores and prostate volume after 45 days [13].
- Varuna bark extract improved urinary frequency and flow measures in a 12-week trial [10].
- Combination therapy of Chandraprabha + Punarnava reduced nocturia and PVR urine [11].

3.5 Pharmacological Mechanisms

Modern pharmacology supports Ayurvedic herbs via:

- Anti-inflammatory action (inhibition of COX-2, TNF- α)
- Anti-androgenic activity (reduction in DHT synthesis)
- Smooth muscle relaxation (Ca²⁺ channel blockade)
- Reduction of oxidative stress
- Modulation of detrusor muscle function

4. Discussion

This review shows strong conceptual correlation between BPH and Ayurvedic conditions like *Vatashtheela* and *Mutraghata*. Both systems recognize obstruction, swelling, and urinary retention as core features. The Ayurvedic pathogenesis emphasizes *Vata-dushti* and *Srotorodha*, aligning with the modern understanding of bladder outlet obstruction and stromal hyperplasia.

Herbal medicines—particularly Gokshura, Varuna, Punarnava, and Chandraprabha Vati—demonstrate multi-target actions including anti-androgenic, diuretic, anti-proliferative, and anti-inflammatory activities. These overlap with the mechanisms of modern drugs such as 5- α -reductase inhibitors and α -blockers, yet with fewer reported side effects.

Panchakarma therapies like Basti and Uttara-basti appear particularly valuable for restoring Apana Vayu function and relieving obstruction. Clinical studies, though limited, show improvements in PVR volume, urinary flow, and symptom burden.

The strengths of this review include integration of classical texts with modern scientific findings

and a systematic approach to evidence selection. Limitations include heterogeneity among available studies, potential publication bias, and variations in Ayurvedic practice. Standardizing formulations and Panchakarma protocols is essential for future research.

Overall, integrative Ayurvedic approaches offer promising adjuncts to standard care, with potential for disease modification, not merely symptomatic relief.

5. Conclusion

Ayurvedic literature provides a comprehensive framework for understanding and managing BPH through concepts of *Vatashtheela*, *Mutraghata*, and *Srotorodha*. Clinical and experimental evidence supports the efficacy of herbs such as Gokshura, Varuna, Punarnava, and formulations like Gokshuradi Guggulu and Chandraprabha Vati. Panchakarma therapies, especially Basti and Uttara-basti, show significant therapeutic potential.

Integrative approaches may reduce symptom burden, improve urinary flow, and enhance overall quality of life. High-quality randomized trials, standardized protocols, mechanistic human studies, and long-term safety data are urgently needed to substantiate Ayurvedic interventions in BPH.

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