



**"EFFICACY OF DEVADARVYADI KWATH IN THE MANAGEMENT OF BLADDER  
OUTLET OBSTRUCTION (BOO): A CLINICAL APPROACH"**

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**ABSTRACT**

This study investigates the efficacy of **Devadarvyadi Kwath**, an Ayurvedic formulation, in managing **Bladder Outlet Obstruction (BOO)**, focusing on its ability to alleviate urinary symptoms and improve quality of life. A single-arm observational clinical trial was conducted with 10 male patients aged 50–59 years, diagnosed with BOO, who presented symptoms of urinary obstruction. The intervention involved administering **Devadarvyadi Kwath** (40 ml twice daily for 20 days). Patients were assessed on both subjective parameters (e.g., frequency, urgency, hesitancy) and objective measures (e.g., post-void residual urine). Results indicated that 70% of participants experienced significant symptomatic relief, with improvements in urinary flow and reduced residual urine, while 30% showed moderate improvement. No adverse effects were reported. These findings support the potential of **Devadarvyadi Kwath** as a non-invasive, safe, and effective alternative to conventional BOO treatments. Further research with larger sample sizes and longer follow-up periods is warranted to confirm these results.

**KEYWORDS:** Bladder Outlet Obstruction (BOO), Devadarvyadi Kwath, Ayurvedic treatment, Urinary obstruction, Non-invasive alternative.

**INTRODUCTION**

Bladder Outlet Obstruction (BOO) is a common, non-cancerous condition characterized by the enlargement of the prostate gland, leading to urinary symptoms such as frequent urination, urinary hesitancy, weak stream, and incomplete bladder emptying.

This condition becomes more prevalent with age, particularly in men over 50 years, significantly impacting their quality of life. While conventional treatments, such as alpha-adrenergic antagonists (e.g., tamsulosin) and 5-alpha-reductase inhibitors (e.g., finasteride), are widely used to manage BOO, they are often accompanied by side effects, including dizziness, sexual dysfunction, and headache. Furthermore, surgical options like Transurethral Resection of Prostate (TURP) may involve risks such as bleeding, infection, and erectile dysfunction, leading many patients to seek alternative, less invasive treatments.

Ayurveda, a traditional system of medicine with a holistic approach to health, offers promising alternatives for managing BOO and its associated symptoms. Among these treatments, **Devadarvyadi Kwath**, a well-known Ayurvedic formulation, is particularly highlighted in the

**Mutranghat Chikitsa Prakaran of Ashtang Hruday.**

This classical text, which provides guidelines for the treatment of urinary disorders, emphasizes Devadarvyadi Kwath's effectiveness in alleviating urinary obstruction caused by BOO, also referred to as **Mutrasanga** in Ayurveda.

Devadarvyadi Kwath consists of a combination of potent herbs that work synergistically to address the underlying causes of urinary retention and flow obstruction. These herbs are known for their anti-inflammatory, diuretic, and urinary tract health-promoting properties. The formulation is believed to have a beneficial effect on **Vata dosha**, which, according to Ayurvedic principles, plays a crucial role in conditions involving urinary retention and bladder outlet obstruction.

The primary ingredients of **Devadarvyadi Kwath** include **Devadaru (Cedrus deodara)**, **Musta (Cyperus rotundus)**, **Murva (Clematis gouriana)**, **Yashtimadhu (Glycyrrhiza glabra)**, and **Haritaki (Terminalia chebula)**, each contributing specific therapeutic properties that support the urinary system and promote better prostate health. This study aims to critically evaluate the efficacy of **Devadarvyadi Kwath** in the

management of BOO, specifically focusing on its role in relieving symptoms of urinary obstruction. By analyzing the formulation's mechanisms of action, therapeutic benefits, and clinical outcomes, the study seeks to provide evidence for its potential as an effective, non-invasive treatment option for individuals with BOO, particularly for those who prefer to avoid conventional pharmaceuticals or surgical interventions.

#### AIM OF THE STUDY

To assess the clinical efficacy of Devadarvyadi Kwath in patients with BOO, particularly focusing on its impact on urinary symptoms and quality of life.

#### MATERIALS AND METHODS

**1. Study Design:** A single-arm observational clinical study was conducted to evaluate the efficacy of **Devadarvyadi Kwath** in managing symptoms associated with **Bladder Outlet Obstruction (BOO)**. This design was selected to assess the natural progression of symptom relief in a homogeneous patient group without comparison to a control or placebo. The primary objective was to observe changes in subjective symptoms and objective parameters associated with urinary obstruction, such as **frequency of urination, urgency, hesitancy, dribbling, incomplete voiding, post-void residual urine volume (PVR)**.

**2. Sample Size:** A total of **10 male patients**, aged **50–59 years**, diagnosed with **BOO** were enrolled in the study. The sample size was determined based on the feasibility of recruitment and the availability of resources for the study. While the sample size is relatively small, it allows for preliminary assessment of the treatment's effects. The study acknowledges that larger studies with more participants are necessary for statistical validation and generalizability of the results.

**3. Inclusion Criteria:** Male patients aged **50–59 years** diagnosed with **BOO** according to clinical symptoms and/or confirmed by diagnostic imaging (such as transrectal ultrasound or digital rectal exam) were eligible for the study. Only patients who presented with **symptoms of urinary obstruction** were included. Specific symptoms included.

- **Hesitancy:** Difficulty in starting the urinary stream, indicative of bladder outlet obstruction.
- **Weak urine stream:** A reduction in the force and volume of urination, commonly seen in BOO due to prostate enlargement.
- **Incomplete voiding:** A subjective sensation of the bladder not being fully emptied after urination, leading to recurrent urges to urinate.

#### 4. Exclusion Criteria

- **Systemic disorders:** Patients with known systemic illnesses (e.g., diabetes, hypertension, cardiovascular diseases) were excluded to avoid confounding effects on urinary symptoms.

- **Urinary tract infections (UTIs):** Individuals diagnosed with active UTIs were excluded, as these infections could alter urinary symptoms and complicate the assessment of BOO-specific symptoms.
- **Prior surgical intervention for BOO:** Patients who had undergone previous surgical procedures (such as **TURP** or **prostatectomy**) for BOO were excluded to eliminate the influence of post-surgical complications or residual effects from previous treatments.

**5. Intervention:** The **intervention** involved the oral administration of **Devadarvyadi Kwath**, a traditional Ayurvedic herbal formulation, at a dosage of **40 ml twice daily**, administered after meals for duration of **20 days**. The formulation was prepared according to standard Ayurvedic guidelines, using the following key ingredients.

- **Devadaru (Cedrus deodara):** Known for its diuretic, anti-inflammatory, and urinary flow-enhancing properties.
- **Musta (Cyperus rotundus):** Used for its action in improving urinary flow and reducing bladder retention.
- **Murva (Clematis gouriana):** Known for its ability to balance Vata and support the urinary system.
- **Yashtimadhu (Glycyrrhiza glabra):** Provides balancing effects on inflammation and supports bladder function.
- **Haritaki (Terminalia chebula):** Renowned for its ability to promote healthy digestion and facilitate detoxification processes.

The dosage of 40 ml twice daily was chosen based on standard Ayurvedic practices and existing clinical reports suggesting its efficacy for managing urinary obstruction and symptoms of BOO. The duration of treatment was set to **20 days** to observe short-term improvements in symptoms and objective parameters. The patients were closely monitored for any adverse effects during the intervention period, and adjustments were made if necessary. All patients were instructed to maintain their regular dietary habits and lifestyle throughout the study period to ensure that the effects observed were primarily attributable to the intervention.

Data collection was performed at the beginning of the study (baseline) and at the end of the 30-day treatment period to assess changes in both subjective symptoms and objective urinary parameters.

#### ASSESSMENT CRITERIA

##### Subjective Parameters

- **Frequency of urination:** This refers to how often the patient feels the need to urinate during the day and night. An increased frequency can indicate urinary retention or irritative symptoms associated with BOO.

- **Urgency:** This denotes the sudden, strong need to urinate, often accompanied by discomfort and difficulty in delaying micturition.
- **Hesitancy:** Difficulty in starting urination, characterized by a delayed onset of the urinary stream.
- **Dribbling:** Involuntary leakage of urine after the main urinary stream has ceased.
- **Sensation of incomplete voiding:** A subjective feeling that the bladder has not been completely emptied after urination.
- **Objective Parameters**
  - **Post-void residual urine volume (PVR):** Measured using ultrasound, PVR quantifies the amount of urine left in the bladder after urination. High PVR values are indicative of bladder outlet obstruction.

#### Patient Master Chart

Patient No.	Age	Frequency of Urination (BT/AT)	Urgency (BT/AT)	Hesitancy (BT/AT)	Dribbling (BT/AT)	Incomplete Voiding (BT/AT)	Post-Void Residual (PVR) (BT/AT)	Result
1	51	8/5	3/1	3/1	2/1	3/1	90/40	Good
2	55	10/6	4/2	4/2	3/2	4/2	100/50	Good
3	50	9/7	3/2	3/2	3/2	4/3	95/70	Average
4	55	7/4	2/1	2/1	2/1	3/1	80/30	Good
5	52	9/5	3/1	3/1	3/1	3/1	85/40	Good
6	58	10/8	4/3	4/3	4/3	4/3	110/80	Average
7	52	8/5	3/1	3/1	3/1	4/2	90/50	Good
8	53	9/6	4/2	4/2	4/2	4/2	95/50	Good
9	58	8/6	3/2	3/2	3/2	3/2	85/60	Average
10	56	8/4	3/1	3/1	3/1	3/1	90/30	Good

(BT: Before Treatment, AT: After Treatment)

#### OBSERVATIONS

- Among 10 patients, 7 showed significant improvement in symptoms such as reduced urgency, and decreased post-void residual urine.
- 3 patients exhibited moderate improvement, particularly in subjective parameters.

#### RESULTS

- **Good Response:** 70% of patients (7/10) demonstrated marked improvement in both subjective and objective parameters.
- **Average Response:** 30% of patients (3/10) showed moderate improvement.
- No adverse effects were reported during the study period.

#### DISCUSSION

The results of this study are in line with the Ayurvedic understanding of **Mutraghat** and **Mutrasanga**, conditions associated with urinary obstruction and retention due to prostate enlargement (as seen in BOO). According to Ayurveda, **Vata dosha** plays a significant role in these conditions, causing difficulty in urination and incomplete bladder emptying. **Devadarvyadi Kwath**, a key Ayurvedic formulation, contains a combination of herbs with specific properties that address these issues.

- The **Tikta** (bitter), **Kashay** (astringent), and **Katu** (pungent) tastes of the herbs in **Devadarvyadi Kwath** are known for their **Vata-balancing** and **Kapha-reducing** effects. These tastes help clear toxins and blockages from the urinary tract and prostate, facilitating smoother urine flow. The **Ushna Virya** (hot potency) of the formulation

further aids in **Shodhan** (cleansing) and **Lekhan** (scraping) actions, which help eliminate excess mucus, toxins, and obstructions that hinder normal urination. Additionally, **Ushna Virya** supports **Virechan Karma** (purging action), which promotes the elimination of excess doshas (especially **Vata**) from the body, thereby enhancing urine flow and relieving symptoms of obstruction, such as hesitancy, dribbling, and incomplete voiding.

- The findings suggest that **Devadarvyadi Kwath** is particularly effective in relieving symptoms of **BOO** in **mild to moderate cases**. Its non-invasive nature makes it a promising alternative to conventional treatments such as alpha-blockers, 5-alpha-reductase inhibitors, and surgery, which may be associated with side effects like sexual dysfunction, dizziness, and post-operative complications.

#### CONCLUSION

**Devadarvyadi Kwath** proves to be a **safe and effective treatment** for managing **BOO**, as demonstrated by the fact that 70% of patients experienced significant symptomatic relief. The formulation not only addresses urinary symptoms such as frequency, urgency, hesitancy, and dribbling, but it also enhances urinary flow and reduces post-void residual urine. Given its efficacy and lack of adverse effects, **Devadarvyadi Kwath** presents a viable **non-invasive** alternative to conventional treatments for **BOO**.

To further establish its place in clinical practice, **larger studies** with **extended follow-up periods** are needed to validate these findings and assess the long-term benefits of **Devadarvyadi Kwath**. Future research could also explore its potential as a **mainstream alternative**

treatment for **BOO**, especially for patients who prefer **natural therapies** or are not candidates for conventional pharmaceutical or surgical options.

#### REFERENCES

1. **Charaka Samhita**: Acharya Charaka. Charaka Samhita. 1st ed. Varanasi: Chowkhamba Sanskrit Series, 2001; Sutrasthana, Chapter 11, verses 37-40, p. 275-278. This classical Ayurvedic text provides a detailed understanding of urinary disorders in Ayurveda, including conditions like Mutraghat and Mutrasanga, which are closely associated with Bladder Outlet Obstruction (BOO).
2. **Ashtanga Hridayam**: Acharya Vagbhata. Ashtanga Hridayam. 1st ed. Varanasi: Chowkhamba Sanskrit Series, 2003; Chapter 11, verses 36. This reference highlights the use of Ayurvedic formulations such as Devadarvyadi Kwath for treating urinary disorders, including prostate enlargement (Mutrasanga).
3. **Bhaishajya Ratnakara**: Acharya Govinda Das. Bhaishajya Ratnakara. 1st ed. Varanasi: Chaukhamba Surbharati Prakashan, 2008; Pradhanakhanda, Chapter 24, verses 118-120, p. 456-460. This work elaborates on the properties and therapeutic effects of herbs like Devadaru and Musta, key ingredients in Devadarvyadi Kwath, which help treat urinary retention and prostate enlargement.
4. **Sharngadhara Samhita**: Acharya Sharngadhara. Sharngadhara Samhita. 1st ed. Varanasi: Chaukhamba Surbharati Prakashan, 2011; Madhyama Khanda, Chapter 11, verses 5-8, p. 112-115. This text discusses the role of Vata dosha in urinary retention and BOO, emphasizing the therapeutic use of herbs that balance Vata and support urinary health.
5. **Chakradatta**: Chakrapani. Chakradatta. 1st ed. Varanasi: Chaukhamba Sanskrit Pratishthan, 2005; Chapter 4, verses 15-20, p. 150-155. This work describes various Ayurvedic formulations, including Devadarvyadi Kwath, that alleviate symptoms of urinary obstruction and prostate enlargement, contributing to the treatment of BOO.