

EFFICACY OF *UTTAR-BASTI* IN LOWER URINARY TRACT SYMPTOMS (LUTS)*¹Dr. Maheshkumar N. Chaudhari and ²Dr. Mrudula M. Chaudhari¹ M.S., Ph.D. (Shalya-Tantra), M.A., Ph.D. (Sanskrit). Professor & HOD (Shalya-Tantra Dept.) Chaitanya Ayurveda College & Hospital, Bhusaval-425201, Dist.- Jalgaon (Maharashtra).²BAMS, MA (Sanskrit) Nilvasu Hospital, Municipal Park, Bhusaval-425201, Dist.- Jalgaon (Maharashtra).

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ABSTRACT

Now a days people are more suffered from LUTS (Lower urinary tract symptoms). Lower urinary tract symptoms (LUTS) are the commonest world wide problem. But there is no permanent, side- effect less remedy for this LUTS. But Uttar-Basti may be the good option for this. Here Ayurveda works, according to Ayurveda science, urinary bladder is reside of Vata and entire life urinary bladder is working. Due to Vata vitiation, there is dryness in bladder muscles, veins, arteries and accessory part of lower urinary system. Urine is acidic, this also helps to vitiate the Vata and tail (Oil) is the best for Vata mitigation. So we decided to work over this burning problem of LUTS by Uttar-basti. Uttar-Basti is a special treatment of Ayurveda. Uttar-Basti is an important and specialized therapy in Ayurveda to treat genital diseases of both men and women. Uttar-basti is a new treatment method for modern world, but in Ayurveda it well elaborated by Acharya Sushruta in his scripture i.e. Sushruta Samhita. This treatment is very beneficial in uro-genital diseases in both genders. Lower urinary tract symptoms (LUTS) refer to a group of clinical symptoms involving the urethra, urinary sphincter, the prostate and bladder in men. LUTS include various symptoms involving frequently urination, leaking urine, having sudden and frequent urges to pee, having a weak stream or feeling like you can't empty your bladder, voiding or obstructive symptoms such as hesitancy, poor and/or intermittent stream, straining, prolonged micturition, feeling of incomplete bladder emptying, dribbling, etc, and storage or irritative symptoms such as frequency, urgency, urge incontinence and nocturia. In Uttar-Basti, a certain sterilized medicated oil, ghee or decoction is used for intra-uterine or urethral application according to the purpose. This will takes about 15-20 minutes to complete procedure safely. This is done for 3-7 consecutive days or as per the patient's purpose. This is OPD level process, no need to take leave from office. Also this is a very cost effective. Skill and experience are important in performing such procedures, Uttar-basti for urinary problems can be done as many times as needed. It does not cause any infection, if all aseptic precautions are taken. In this study, we studied & treated all lower urinary tract symptoms (LUTS) by Uttar-basti treatment with Bala-Ashwagandh Tail. And we found that Uttar-basti treatment is very effective in LUTS. Further comparative study should be taken with modern medicine. Uttar-basti, not only controls LUTS but also nourishes, enhances the mucous membrane layer of lower urinary tract.

KEYWORDS: *Uttar-basti*, LUTS, Ayurveda, *Bala-Ashwagandh Tail*.

INTRODUCTION

स्वभ्यक्तबस्तिमूर्धानं तैलेनोष्णेन मानवम् ।

ततः समं स्थापयित्वा नालमस्य प्रहर्षितम् ॥110॥

पूर्व शलाकयाऽन्विष्य ततो नेत्रमनन्तरम् ।

शनैः शनैर्घृताभ्यक्तं विदध्यादङ्गुलानि षट् ॥ 111 ॥ सु. चि.

37

Method of administration of *Uttara basti* in men

After *Snehana* & *Swedan*, a patient with soft abdomen - by giving ghee, milk, *Yavagu* as per his *Agni-bal* (*Digestion power*), should be seated straight at knee high level and thoroughly massaged with warm oil on the

upper part of the waist region of the patient. Then after setting the penis in the straight position, explore the urethra with the probe and then slowly insert the catheter smeared with ghee (*Nadiyantra*) up to 6 *angul* into the urethra.

शुक्रं द्रुष्टं शोणितं चाङ्गनानां पुष्पोद्रेकं तस्य नाशं च कष्टम् ।
मूत्राघातान्मूत्रदोषान् प्रवृद्धान् योनिव्याधिं संस्थितिं चापरायाः
॥125॥

शुक्रोत्सेकं शर्करामशमरी च शूलं बस्तौ बहुणे मेहने च ।

घोरानन्यान् बस्तिजांशवापि रोगान् हित्वा मेहान्ततरो हन्ति
बस्तिः ॥ 126 ॥ सु. चि. 37

Result of *Uttar-Basti*

Uttar-Basti, works in contaminated sperm, menstruation of women, excess menorrhoea, amenorrhoea and dysmenorrhoea, retention of urine, dysurea, vaginal diseases, obstruction of placenta, semen discharge, bladder calculi and pain in bladder and penis, And destroys other terrible diseases of the bladder except Diabetes.

Benefits

- 1) Improves the function of the reproductive system.
- 2) Insure or restore proper blood supply to the uterus to enhance fertility.
- 3) Nourishes uterine & bladder health.

What is LUTS?

Lower urinary tract symptoms (LUTS) refer to a group of clinical symptoms involving the urethra, urinary sphincter, the prostate and bladder in men. LUTS include various symptoms involving frequently urination, leaking urine, having sudden and frequent urges to pee, having a weak stream or feeling like you can't empty your bladder, voiding or obstructive symptoms such as hesitancy, poor and/or intermittent stream, straining, prolonged micturition, feeling of incomplete bladder emptying, dribbling, etc, and storage or irritative symptoms such as frequency, urgency, urge incontinence and nocturia.

Post-micturition symptoms include post-micturition dribble (or UI) and the sensation of incomplete emptying. LUTS are very common and may affect individuals of all ages, in both genders. Medicines like antibiotics can help treat urinary tract infections, a common cause of LUTS. Other medicines can relax the bladder, constrict the bladder, or reduce the size of the prostate depending on the cause of LUTS.

In general, treatment of LUTS associated with BPH is based on the effect of the symptoms on quality of life (QOL) and include medical therapy aimed at reducing outlet obstruction or decreasing the size of the prostate. If medical therapy fails or is contraindicated, various surgical options exist.

There are many possible causes of LUTS such as abnormalities or abnormal function of the prostate, urethra, bladder or sphincters. In men, the most common cause is benign prostate enlargement (BPE), which obstructs the bladder outlet. Alpha 1-blockers are usually considered the first-line drug treatment for male in LUTS because of their rapid onset of action, good efficacy and low rate and severity of adverse events. Caffeine and carbonated beverage reduction can be helpful to decrease LUTS, while increasing citrus beverage intake may be protective. The relationship between alcohol intake and

LUTS is less clear and therapeutic recommendations should be made on an individual basis.

Common Medications Can Contribute to Lower Urinary Tract Symptoms in Men

- Anti-depressants account for 4% of LUTS.
- Diuretics account for 3% of LUTS.
- Broncho-dilators account for 2% of LUTS.
- Anti-histamines account for 1% of LUTS.

Common causes of neurogenic LUTS or LUTD include spinal cord injury, multiple sclerosis, Parkinson's disease, cerebro-vascular accidents, cauda equina syndrome, diabetes mellitus and multiple system atrophy. Lower urinary tract symptoms (LUTS) are a common complaint among aging men and are often caused by benign prostatic hyperplasia (BPH). A number of medical treatments for LUTS/BPH exist, such as α -blockers, 5 α -reductase inhibitors, anticholinergics, phosphodiesterase type 5 (PDE5) inhibitors, and combination therapies.

Stopping smoking may significantly improve symptoms, as nicotine irritates the bladder. Sitting to pass urine. Evidence shows that men with LUTS have reduced symptoms if they sit to pass urine instead of standing. Try to train the bladder. Typically for the initial diagnosis of prostate disease, or LUTS, we use the International Prostate Symptom Score (IPSS) to gauge the symptoms, along with a physical examination (including a digital rectal exam or DRE. In addition, we will generally do a urine test called a urinalysis.

According to EAU guidelines, α -blockers are considered the first-line drug treatment for men with moderate-to-severe LUTS. Alpha-blocking drugs include alfuzosin, doxazosin, silodosin, tamsulosin and terazosin. 5-Alpha reductase inhibitors are pills that can increase urine flow and shrink the prostate by blocking DHT.

5- Alpha reductase inhibitors - These medicines shrink the prostate. They do this by preventing hormone changes that cause the prostate to grow. Examples include finasteride (Proscar) and dutasteride (Avodart). They might take up to six months to work well and can cause sexual side effects. Surgical treatment of lower urinary tract symptoms (LUTS) due to benign prostatic obstruction (BPO) comprises a variety of treatment modalities. Transurethral resection of the prostate (TURP) is considered the gold standard. In the last decade various new techniques have emerged with encouraging functional results. The most common risk factor for the development and progression of lower urinary tract symptoms (LUTS) is age, other risk factors for LUTS in men include - increased serum dihydrotestosterone levels. Lower urinary tract symptoms (LUTS) have been associated with comorbid conditions such as anxiety and depression. In addition, stress appears to influence the development or exacerbation of LUTS.

We found that LUTS was associated with depression, anxiety, and stress symptoms. In addition, patients with severe depressive symptoms had severe LUTS. Too little sleep can increase the risk of developing a UTI. Lack of sleep can weaken the immune system, making it harder for your body to fight off bacteria that enter the urinary tract.

“शक्नुमार्गस्य बस्तेश्च वायुरन्तरमाश्रितः ।

अष्ठिलावद् घनं ग्रंथिं करोत्यचलमुन्नतम् ॥

विण्मुत्रानिलसंगश्च तत्राध्मानश्च जायते ।

वेदना च परा बस्तौवाताष्ठीलेति तां विदुः ॥” सु. उ. 58/7-8

Ashthhila (Prostate gland) situated in the middle of rectum and urinary bladder, *Apana Vayu* enlarges a dense (hard) gland like *Ashthhila*, which is somewhat movable and raised. Due to the enlarged gland, there is obstruction of stool, urine and *vayu*. Below the navel region, there is distension and intense pain in the bladder. So this disease is called ‘*Vatashthhila*’. *Vatashthhila* (Enlarged Prostate) is one of the type of *Mutraghat* (Retention of Urine) among all 12 types.

Benefits of Uttar-Basti

“मुत्राघातान्मूत्र दोषान् प्रवृद्धान्

योनिव्याधि संस्थिति चापरायाः ।

शुक्रोत्सेकं शर्करामशमरीं च

शूलं बस्तौ वन्क्षणे मेहने च ।

घोरानन्यान् बस्ति जांश्चापि रोगान्

हिंत्वा मेहानुत्तरो हन्ति बस्तिः ॥” सु. चि. 37/ 125-126

Uttara Basti destroys retention of urine and other urinary disorders, vaginal diseases, spermatorrhea, calculi & its gravals, colicky pain in loin & groin region and other dangerous diseases of bladder. *Ashthhila* is a Sanskrit term. There is not any chances of infection from the medicines used in *Uttar-basti* as its sterilized before use and there is not any chances of penis damage by the instruments as it has to handle with experienced persons. *Uttar-Basti* enhances the strength of mucous membrane of bladder. So it avoids infection & nourishes the membrane. Also mitigate the vitiated *Vayu*.

Lower urinary tract symptoms (LUTS) are the commonest world wide problem. Here Ayurveda works, according to Ayurveda science, urinary bladder is reside of *Vata* and entire life urinary bladder is working. Due to *Vata* vitiation, there is dryness in bladder muscles, veins, arteries and accessory part of lower urinary system. Urine is acidic, this also helps to vitiate the *Vata* and tail (Oil) is the best for *Vata* mitigation. So we decided to work over this burning problem of LUTS by *Uttar-basti*.

Regarding this, Acharya Sustruta & Acharya Charak quoted very good formulaes to overcome on these problems. Among of these, we choose *Bala-AshwagandhaTail* for *Uttar-basti*.

In above version, Acharya Sushruta clearly mention, that after giving *Uttar-basti* of *Bala-Ashwagandh Tail*, Atonic bladder & other LUTS (lower urinary tract symptoms), infection, etc. These complications are life threatening / fatal. One intelligent can take regular *Uttar-basti* since mid age to avoid LUTS and its complications as advocated by Acharya Sushruta.

According to Ayurveda, due to vitiation of *Vata* specially *ApanVata*, these conditions arises.

Advantages of Uttar-Basti

- Non-invasive, no pain,
- No need of anesthesia,
- Some times Urethral catheterization is not required,
- Daycare treatment,
- No need of Hospitalization,
- No need for rest,
- Negligible recurrence,
- Does not affect sexual life.

AIMS AND OBJECTS

1. To study the symptomatic relief from LUTS.
2. To study the recurrence.

MATERIALS AND METHODS

This is single blind, single drug study.

30 patients of each symptoms are selected according to inclusion criteria.

Material

Bala-Ashwagandh Tail = 40ml. (i.e.1 Pal as per advised by Acharya Sushruta)

- Sterile gloves, Foley’s rubber Catheter no. 16, Xylocaine jelly 2 %, 50 cc syringe.

Clinical Trial

Clinical study carried out at Chaitanya Ayurveda College, Hospital & Nilvasu Hospital, Bhusaval, Dist.- Jalgaon (Maharashtra) India.

Methods – (Study Design)

In supine lying down (slightly head up position as per advised by Acharya Sushruta)

- Procedure should perform in OT & with following all aseptic precautions are to be carried out.
- Patient should be micturated prior to procedure. (Evacuation of bladder is mandatory.)
- Well lubricated Foley’s rubber catheter with xylocaine jelly 2% is to be introduced in urinary bladder gently, till the little amount of urine is come out. (this is for confirmation that catheter is in situ.)
- Complete evacuation of bladder should be done by gentle pressure by fist given over hypogastric region of the patient.
- After confirmation– already loaded 50 cc syringe of 40 ml of warm *Bala-Ashwagandh Tail* is to be pushed in bladder without air.

- Then slowly Foley’s catheter is to be removed.
- Patient should keep in same position for 15 minutes.
- The procedure continues for 7 days.
- Evaluation clinically & ultra-sonographically on 8th days.
- No any other drug should be given during therapy. (Orally or Parenterally.)

Inclusion criteria

- Age between 50 to 70 years (Except Enuresis),
- Patient have clinical symptoms of LUTS,
- USG Report – Prostate size between 20 to 40 gms.
- Post void residual urine quantity should > 25 to < 100 ml
- RFT should be in normal range.

Dose of Uttar Basti- 40ml (Su. Chi. 102/37)

Criteria for assessment

- Hesitancy,
- Urgency & frequency of urination,
- Nocturia,
- Dysurea,
- Retention of urine,
- Poor urine stream/ dribbling,
- Post void residual urine,
- Reduce wt. & size of prostate gland,
- Post *Uttar-Basti* Infection (LUTI),
- Hypotonic Bladder,
- Neurogenic Bladder,
- Urethral Stricture,
- Enuresis.

Exclusion criteria

- Age = < 50 & > 70 years (Except Enuresis),
- Prostate malignancy, Bladder Carcinoma, Bladder tumour, any other bladder related diseases,
- Renal failure and other complications like DM.
- Haematuria

Investigations

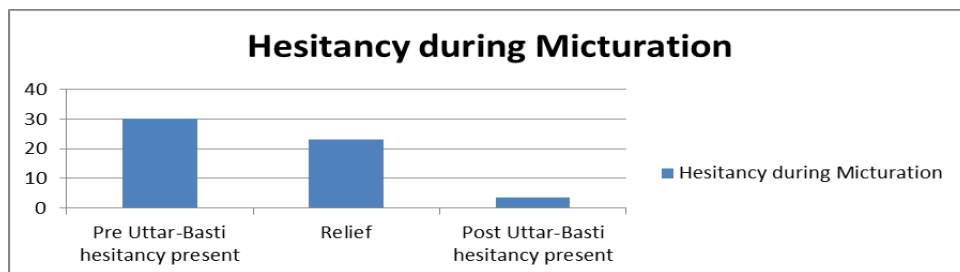
- CBC
- Sr. BUL,
- Sr. Creatinine,
- Sr. PSA,
- Urine (Routene & C/S)
- USG (Abd. & pelvis) - (Pre and Post procedure),
- Urodynamic study, Urethrogram, Urine Flow-metry Test (where necessary)

Results of *Uttar-basti* are assessed clinically and comparison between pre and post-treatment by Urethrogram and Uro-flowmetry.

Data Analysis

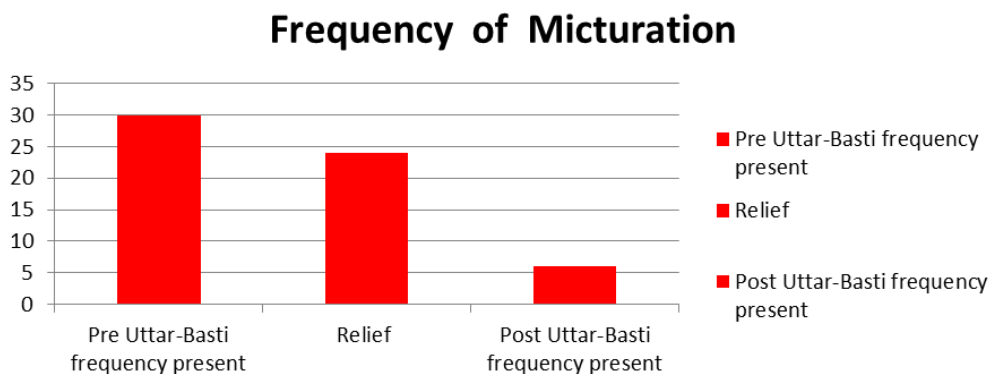
1) Hesitancy during Micturation – Total no. of patients = 30

Pre Uttar-Basti hesitancy present	Relief	Post Uttar-Basti hesitancy present (No Relief)	Result
30	23	7	76.66 %



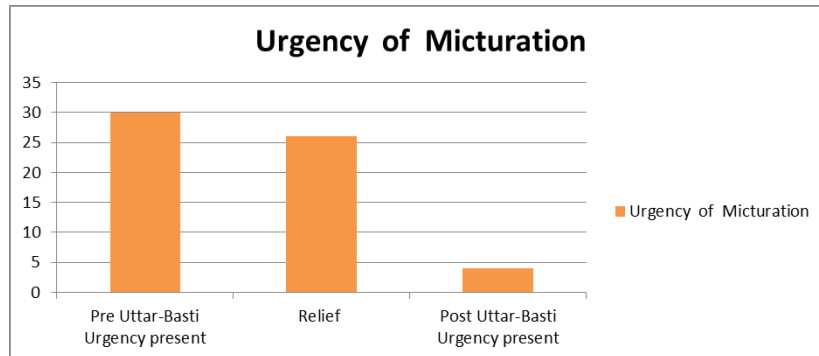
2) Frequency of Micturation – Total no. of patients = 30

Pre Uttar-Basti frequency present	Relief	Post Uttar-Basti frequency present	Result in %
30	24	6	80 %



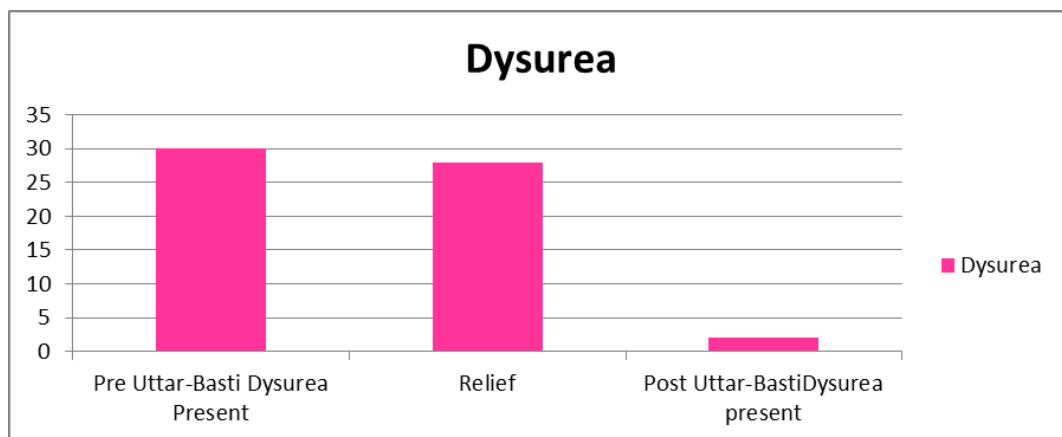
3) Urgency of Micturation – Total no. of patients = 30

Pre Uttar-Basti Urgency present	Relief	Post Uttar-Basti Urgency present	Result in %
30	26	4	86.66 %



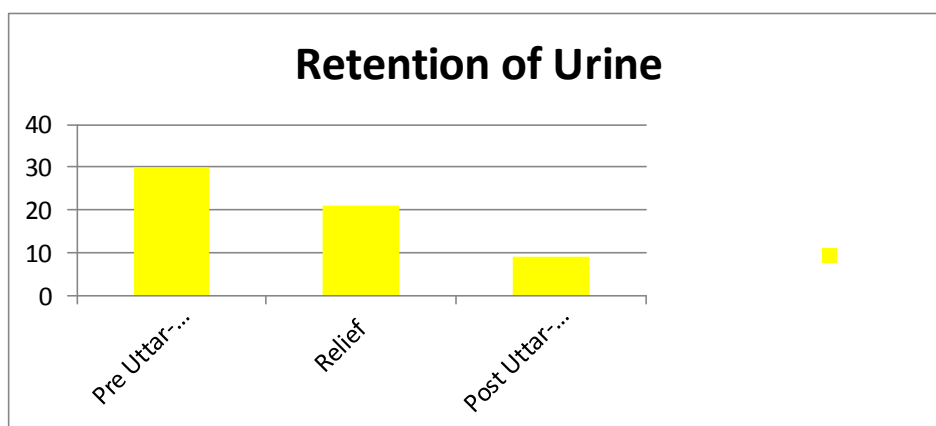
4) Dysurea – Total no. of patients = 30

Pre Uttar-Basti Dysurea present	Relief	Post Uttar-Basti Dysurea present	Result
30	28	2	93.33 %



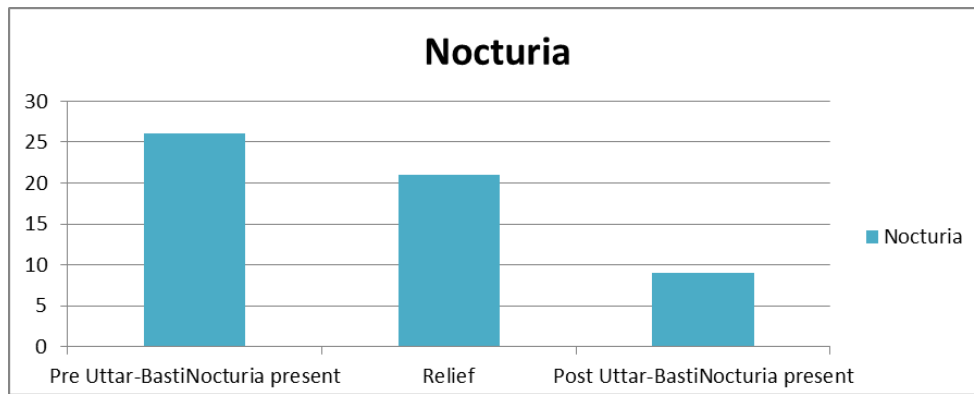
5) Retention of Urine – Total no. of patients = 30

Pre Uttar-Basti Retention of urine present	Relief	Post Uttar-Basti Retention of urine present	Result %
30	21	9	70 %



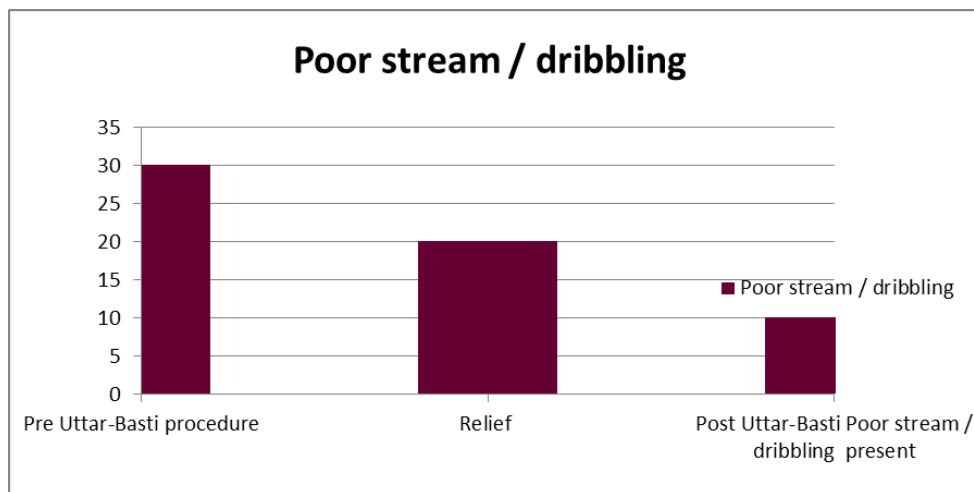
6) Nocturia – Total no. of patients = 30

Pre Uttar-Basti Nocturia present	Relief	Post Uttar-Basti Nocturia present	Result %
30	21	9	70 %



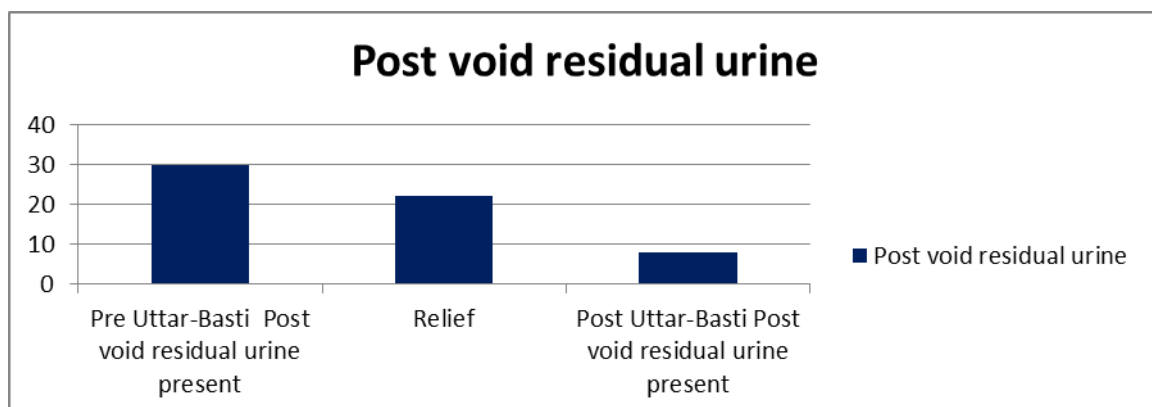
7) Poor stream / dribbling – Total no. of patients = 30

Pre Uttar-Basti Poor stream / dribbling present	Relief	Post Uttar-Basti Poor stream / dribbling present	Result
30	20	10	66.66%



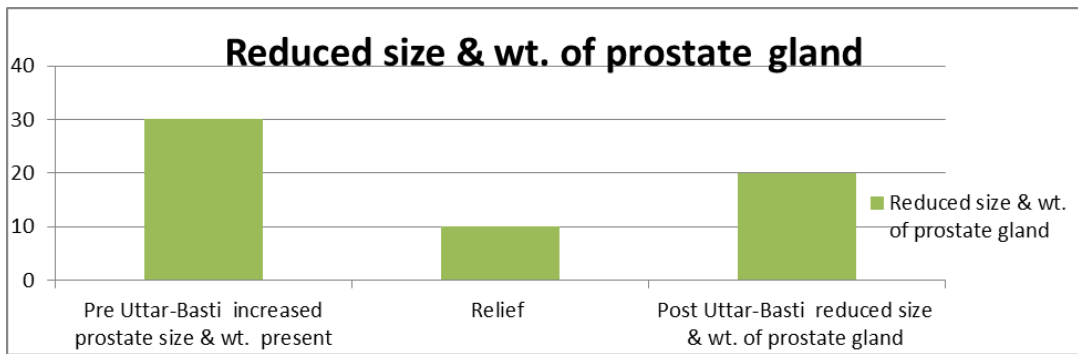
8) Post void residual urine – Total no. of patients = 30

Pre Uttar-Basti Post void residual urine present	Relief	Post Uttar-Basti Post void residual urine present	Result
30	22	8	73.33 %



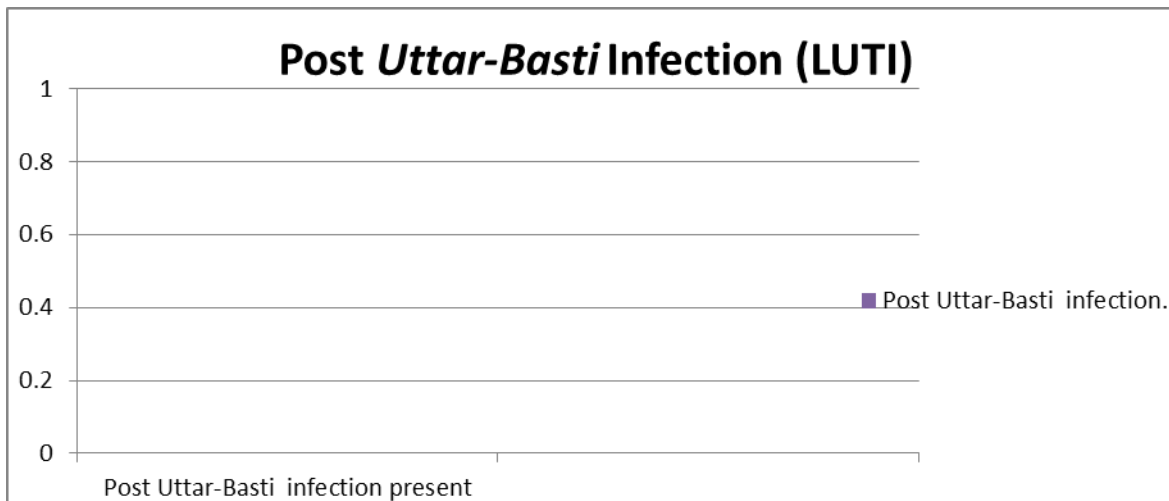
9) Reduce size & wt. of prostate gland – Total no. of patients = 30

Pre Uttar-Basti increased prostate size & wt. present	Relief	Post Uttar-Basti Reduced size & wt. of prostate gland	Result
30	10	20	33.33 %



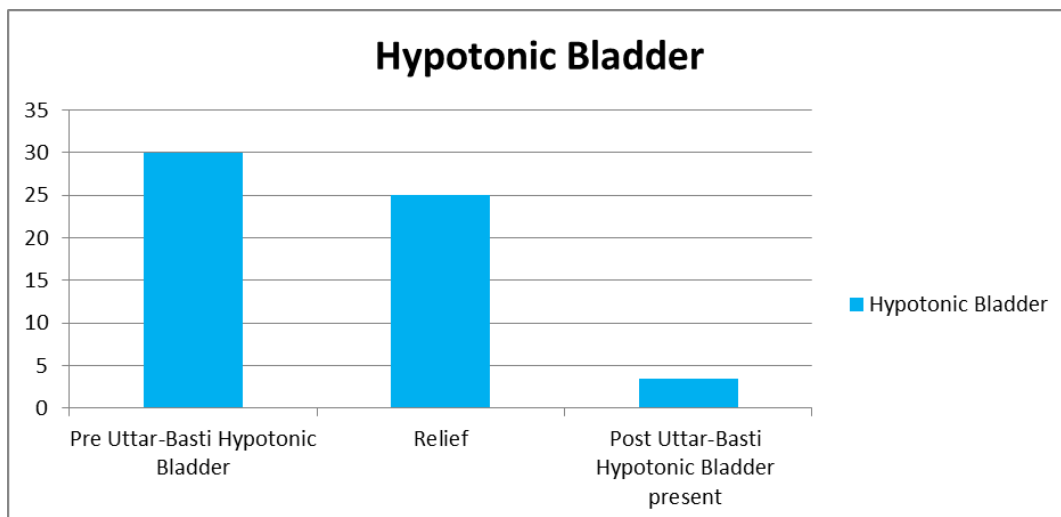
10) Post *Uttar-Basti* Infection (LUTI) – Total no. of patients = 30

Pre <i>Uttar-Basti</i> infection	Post <i>Uttar-Basti</i> infection	Result
0	0	100 %



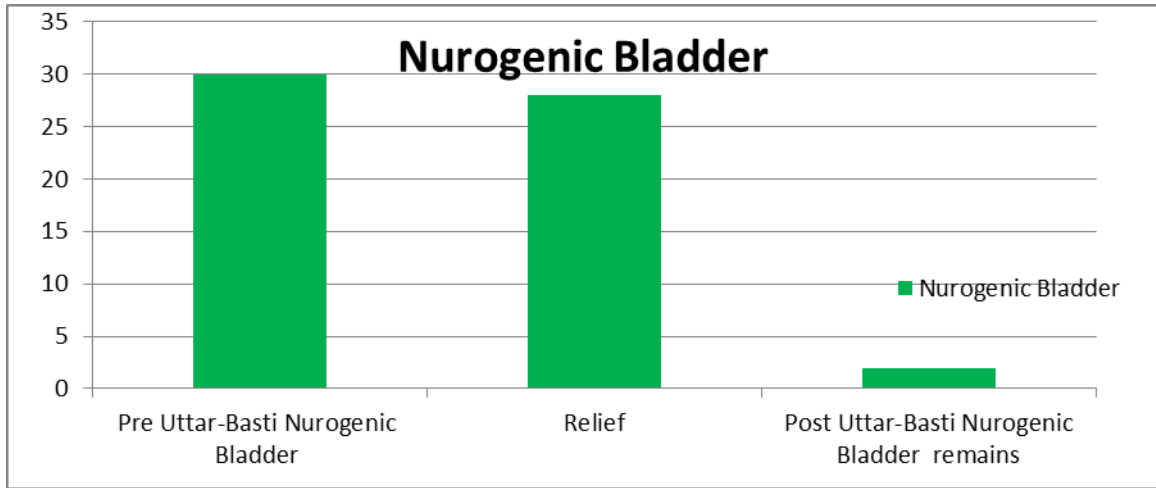
11) Hypotonic Bladder - Total no. of patients = 30

Pre <i>Uttar-Basti</i> Hypotonic Bladder	Relief	Post <i>Uttar-Basti</i> Hypotonic Bladder present	Result
30	25	5	83.33%



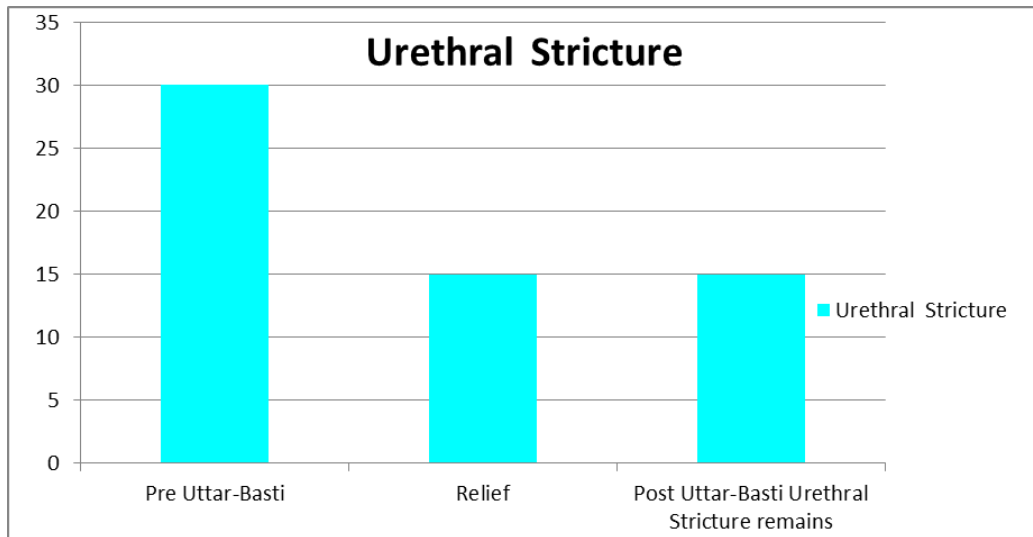
12) Neurogenic Bladder - Total no. of patients = 30

Pre <i>Uttar-Basti</i> Neurogenic Bladder	Relief	Post <i>Uttar-Basti</i> Neurogenic Bladder remains	Result
30	28	2	93.33%



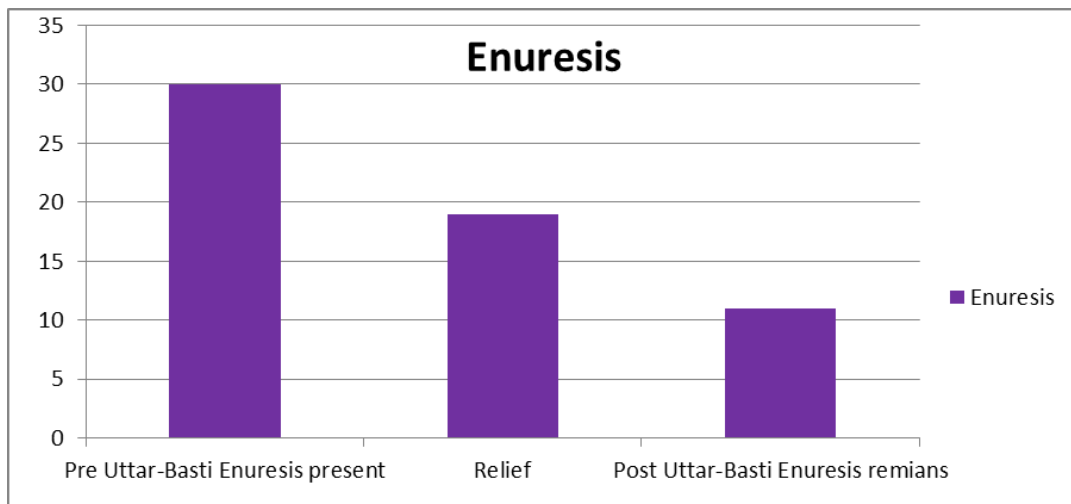
13) Urethral Stricture - Total no. of patients = 30

Pre Uttar-Basti Urethral Stricture	Relief	Post Uttar-Basti Urethral Stricture remains	Result
30	15	15	50 %



14) Enuresis - Total no. of patients = 30

Pre Uttar-Basti Enuresis present	Relief	Post Uttar-Basti Enuresis remains	Result
30	19	11	63.33 %



OBSERVATION

- *Uttar-basti* (Induction of drug in urinary bladder) is the part of *Panchakarma Chikitsa*.
- *Uttar-basti*, mitigate the vitiated *Apan Vata* & strengthen to detrusor muscles of the bladder.
- The wall of the bladder is comprised of smooth muscle fibres oriented in multiple different directions. These smooth muscles fibres are collectively known as the detrusor muscle. This inter woven orientation provides the bladder with the ability to stretch in response to the presence of urine.
- The musculature of the bladder plays a key role in the storage and emptying of urine.
- Drug introduced through *Uttar-basti* directly acts on internal mucous membrane of bladder and prostate & helps in reducing inflammation.
- *Bala- Ashwagandha tail*, oleates urinary bladder, sphincters & Prostate to work smoothly. This is very good for neurogenic bladder and atonic bladder.
- Due to the vitiation of *Apan Vayu* in bladder and other causes like hormonal imbalance, Prostate size increases. Sacculatation, trabeculation and diverticulum are the late complications due to long standing severe retention of urine and this is due to enlargement of prostate and this diverticulum further causes infection, bladder calculi, bladder carcinoma, etc.

Vatashthila includes the term *Vata* and tail is the best mitigative drug for *Vata*.

This *Uttar-basti* procedure takes 15-20 min. Other all medications of BEP was omitted and this study carried out for 7 consecutive days.

We observed that *Bala- Ashwagandha tail Uttar-basti* is effective in BEP. *Bala- Ashwagandha tail* normalizes / controlled vitiated *Apan Vata dosha*. *Bala- Ashwagandha tail* contains- roots of *Bala* & *Ashwagandha* plants. *Til tail* is also best *Vataghna* (*Vata* mitigative).

They have Bladder cleaner, lithotriptic, diuretic, Vilayan and anti inflammatory properties. Obstruction is removed from *Mutra-Vaha Strotas* (i.e. urinary system). Specially at bladder neck, which enhances the function of *Apan-vayu* and relieved from all BEP symptoms and increased urine flow and decreased post void urine residue.

Bala- Ashwagandha tail is absorbed by mucosal layer of bladder and toning to detrusor & sphincter muscles.

No any adverse drug reaction (ADR) were found during this therapy.

RESULT

- Age did not differ significantly.
- Hesitancy (wait for urine to start) relief in 76.66 % of patients.
- Frequency of micturition reduced in 80 % patients.

- Urgency of micturition reduced by 86.66 % patients.
- Dysuria- relief in 93.33 % of patients.
- Retention of urine decreased in only 70 % patients.
- Nocturia reduced by 70 % patients.
- Poor urine stream/ dribbling decreased in 66.66 % patients.
- Post void residual urine decreased in 73.33 % of cases.
- Reduced weight and size of prostate gland in only 33.33 % patients.
- Post procedure infection not found in single of patient.
- Hypotonic / Atonic bladder relief in 83.33 % patients.
- Neurogenic bladder relief in 93.33 % patients.
- Urethral Stricture relieves & increased the span of urethral dilatation in 50 % patients.
- Enuresis relief in 63.33 % patients.
- Total 30 patients of each symptom were screened for participation in this study. On OPD basis, after applying the eligibility criteria, informed consent was obtained from all participants with due risk.
- According to above result, we can clearly say that LUTS can be well managed by *Uttar-basti* treatment. But one must be cautious about iatrogenic infection.

This procedure should be performed by surgeon or skilled person only.

-To confirm the result, this study is not enough. It should be performed on large sample size for its validation. This is encouraging result and good option for current treatment for LUTS.

Further study needs to confirm this data.

CONCLUSION

Efficacy of Bala-Ashwagandha tail Uttar-Basti has great significance in symptomatic relief in Lower urinary tract symptoms (LUTS).

Data Availability

Data are available from the corresponding author.

Conflicts of Interest

The authors declare that they have no conflicts of interest & none source of funding.

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