



Evaluation of Anatomical Changes in a Pilot Study of *Kshar Tail Uttarbasti* in *Mootrasthila*

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Abstract

BPH or Benign Prostatic Hypertrophy is a growing public health problem worldwide. A large proportion of the population from old age is at the risk of benign prostatic hypertrophy. Lifestyle and metabolic factors associated with significantly increased risk of benign prostatic hypertrophy and lower urinary tract symptoms include obesity, diabetes and fat consumption.

Sushurta had described 12 clinical manifestations causing retention or obstruction of urine. *Asthila* is one amongst the 12 types of *mootraghata*. In *Mootrasthila*, swelling is manifested in between *gudmarga* and *basti* which resembles the shape of *Asthila*¹. The symptoms like retention of urine, dribbling, incomplete voiding, hesitancy etc. are found in *Mootrasthila* which resembles the disease BPH, as described in modern medical science². It is not a life threatening disease but is more troublesome and affects the quality of life.

In this study the normal and abnormal anatomy of prostate will be studied. Many of the treatments are described in *Samhitas* for the management of *Mootrasthila*. Among them, *Uttarbasti* is one of the treatments used in this study. Anatomical changes (dimensions) occurring in BPH by administration of *Uttar basti*, will be my observational study.

Keywords

Benign Prostatic Hypertrophy, Mootrasthila, Uttarbasti



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INTRODUCTION

The percentage of pathological Benign Prostatic Hypertrophy all over the world is increasing now-a-days due to lifestyle modifications. Autopsy studies have shown that 50% of 45 years old men have histological evidences of BPH; and it increases to nearly 90% in their ninth decade. BPH is found in about 50% in fifth decade and increase to 80% in men over 80 years of age³. The average weight of prostate identical at autopsy in BPH is 33 ± 16 g. Only 4% of the patients older than 70 years, prostate weighs more than 100 grams

In *Ayurveda*, *Mootraghata* is occurred due to diminished function of *Apana Vayu* along with the vitiation of *Kapha* and *Pitta Dosha*. Due to *Ritu Parivartan* (seasonal changes) improper *Ahara-vihara* (diet and activity or daily regimen) and *Vaya* (advancement of age) vitiated *Doshas* are produced in the body. Ultimately, vitiated *Doshas* travel through *Sukshma Srotasa* and finally *Doshas* are settled down at the *Kha Vaigunya* (diseased area) and developed the clinical entity *Mootraghata*⁴. The symptoms like retention of urine, incomplete voiding, dribbling, hesitancy etc. are found in *Mootrasthila* which resembles the disease BPH, as described in modern medical science. There are anatomical changes in the prostate in benign prostatic hypertrophy.

The prostate gland is made up of glandular and non-glandular components and it is composed of both epithelial and stromal cells. The epithelial budding and glandular morphogenesis in BPH are similar process just like in embryonic tissue, a process generally not allowed in adult organs, therefore BPH is the result of a “reawakening” of the embryonic inductive potential of prostatic stroma in adulthood.

The treatment options in modern medical science is either by conservative treatment using drugs (hormonal therapy, chemotherapy etc.) or surgical procedures like Open Prostatectomy, Transurethral resection of Prostate (TURP) etc. In Hormonal therapy, there are so many complications like loss of libido, impotence and Gynecomastia. Still there is no complete management of Benign Prostatic Hypertrophy (BPH) in modern medical sciences⁵.

Sushruta has adopted a common line of treatment in all the cases of urinary disorders. After proper *Snehana-Swedana* followed by Uttar Basti is the best modality⁶. *Charak* has indicated *Mootrakriccha Nashak Aushadhi* on the basis of vitiated *Dosha* in the body. *Basti*



and *Uttar Basti* are recommended in all types of bladder disorders⁷.

Uttarbasti is an important *Ayurvedic* procedure which is described in details in *Ayurvedic* literatures⁸. The procedure is selected as a method of drug administration in case of BPH for the present study. *Uttarbasti* is a procedure which is easy to practice at OPD level. It is cost effective, requires less equipments and result oriented. *Kshara Taila* is selected for its *Vata-Kapha Shamaka guna and Lekhana* properties.

AIMS AND OBJECTIVES

AIM

“TO STUDY ANATOMICAL CHANGES IN *MOOTRASTHILA* AND ITS MANAGEMENT BY *UTTARBASTI*”

OBJECTIVES

1. To study the anatomical changes in prostate due to benign prostatic hypertrophy.
2. To study the effect of *Uttarbasti* in BPH.

MATERIALS AND METHODS

- **Source of the data:** Patients reporting in the OPD and IPD of Govt. Ayurved Hospital Osmanabad were carefully selected on the basis of diagnostic,

inclusive criteria.

- **Type of Study:** Single Case Study.

INCLUSIVE CRITERIA-

1. Subjects with signs and symptoms of BPH.
2. Subjects with age group between 50 to 80 years.
3. USG bladder suggestive of residual urine less than 100ml.
4. USG prostate suggestive of increase size and weight.

EXCLUSIVE CRITERIA-

1. Subject with severe specific or non specific UTI, urethral stricture, complications of BPH
2. Age of patient less than 50 years.
3. Subject with prostatitis, idiopathic bladder neck obstruction, bladder neck stenosis,
4. Subject with infective disorder like HIV, HBsAg.
5. Uncontrolled diabetes mellitus and HT.
6. Ca Prostate.
7. Residual urine more than 100ml.

• DIAGNOSTIC CRITERIA:

1. Subjective Parameters :

- Diagnosis was based on the clinical signs and symptoms of the disease, which on AMERICAN UROLOGICAL ASSOCIATION- Incomplete emptying
- Frequency



- Weak stream
- Straining
- Nocturia
- Intermittency
- Urgency

Symptoms score before and after treatment will be done as per AUA system score scale⁹

2. Objective Parameters :

- USG
- PSA
- Urine (R & M)

CASE REPORT

A male patient of age 52 years working as a teacher in primary school was complaining of –

- Dribbling micturition
- Urgency of micturition
- Incomplete emptying of bladder since 6 months
- Nocturia 6-7 times
- No H/O – DM / HTN / Koch's / Bronchial Asthma
- No H/O – Any drug allergy
- P / M / H – Nil
- P / S / H – Nil
- Bladder – Dribbling micturition and weak stream
- Sleep – disturbed by nocturia

- Appetite – normal
- Addiction – no
- Diet – Spicy and fermented food regularly
- O / E –
- G.C. - fair
- Temperature – Afebrile
- Wt – 70 kg
- B.P. – 110 / 80 mm Hg
- S / E –
- RS – Chest B/L clear
- CVS – S1, S2 normal
- CNS – Conscious and oriented
- P / A – soft and non-tender

Investigation

- USG Pelvis
- PSA
- Urine (R & M)
- Reports suggested and confirmed BPH as prostate weight was 38 gms and post residual urine volume was 90cc with normal PSA value and urine R&M

Treatment Given

- *Kshar tail Uttarbasti* - 3 sets with the gap of 15 days in each set.
Each set includes 5 basti on every third day to the patient.
- Quantity of *Uttarbasti* – 20ml
- Duration of treatment – 3 month



Investigation Report

The blood investigations like Prostate Specific Antigen (PSA) and Ultrasonography (USG) of prostate were carried out before and after the treatment to assess the effect of therapy.

Table-1

Before Treatment	After Treatment
Prostate Weight – 38 gm	Prostate Weight – 32 gm
Post residual urine volume – 90 cc	Post residual urine volume – 60 cc
AUA Score – 21	AUA Score – 13
PSA- 2.06 ng/ml	PSA- 0.6 ng/ml

RESULTS AND DISCUSSION

- In Ayurvedic texts, Utpatti of *Basti* and *Guda* is from the *Prasada Bhaga* of *Rakta* and *Kapha Doshas*. *Pachana* of *Rakta* and *Kapha* is carried out by *Pitta* and in this process *Vata* helps to potentiate the action. *Mootrasthila* occurs in between *Basti* and *Guda* region and it has influence on the disease manifestation of *Mootrashteela* also. These *Doshas* get aggravate in old age and develop *Kaphaja Granthi* like growth.

- Exact cause of the BPH is still unknown. Development of BPH is multifactorial phenomenon as; there is no strong evidence for risk factors for developing clinical features of BPH. The only true factors related to the development of the

disease are age and changes in hormones. Increased serum estrogen level in old age, which acts on the hypothalamus, causes decrease in secretion of Luteinizing hormone realizing hormone (LHRH) and hence, causing decrease in serum testosterone level. Due to the steroid secreted by the adrenal cortex, balance between dihydrotestosterone (DHT) and local peptide growth factors were disrupted thus increasing the risk of BPH.

- Kshar* is a substance which has property of alleviation and erosion to abnormal *Doshas*, *dhatu*s and *malas*. It is well known for its corrosive, ulcer healing, and antibacterial properties. It is *Tikshna* and *Vata-Pitta avardhaka* by *karma*. The size of prostate before treatment was 38cc in TRUS findings and after treatment it was 32cc. Post residual urine volume reduced from 90cc to 60cc and PSA level drop down from 2.06 ng/ml to 0.6 ng/ml. Thus it can be said that *Kshar Tail* has so much effective to control the growth of prostate gland.

- Kshar* is potent *Vata-Kapha Shamaka* drug, it has antiviral, antibacterial, antihemorrhagic and antioxidant qualities. Therefore it removing the chronic inflammation and fibrosis. Thus *Kshar Taila*



helps in the scraping of the obstruction in the urethra.

Acharya Charaka has said that *Kshar* has the property of *Ksharana*, hence it gradually erodes the *granthi* i.e. *mootrasthila* and brings it downwards.

Restoration of the urethral tube functions is also another very important objective of the study. It can be achieved by pacifying the vitiation of *Vata*. The Snigdha Guna of *Taila* is definitely helpful to relieve the abnormality generated by *Ruksha, Daruna* and *Khara Guna* of *Vata*. It restore the tone of the urethra. Smillary comparative study between *Uttarbasti* of *Til Tail* with *Saindhav* and *Uttarbasti* of *Kshar Tail* will be done.

The mode of action of *Kshar tail Uttarbasti* on benign Prostatic Hypertrophy can be summarized in following points:-

1. It reduces the size of prostate gland and there are mild anatomical changes seen after *Uttarbasti*.
2. Normal functions of the Urethra are restored by removing the blockages, and regularize the natural urges like urination.

So, *Uttarbasti* is a procedure which is very effective and requires less equipments and result oriented. Also they do not have any adverse effects.

CONCLUSION

- The study revealed that, there are anatomical changes in prostate in BPH. *Kshar-tail Uttarbasti* reduced the weight of prostate and the post residual urine volume. The excellent action of *Kshar tail Uttarbasti* might have been due to *Kshar Taila* which is a very potent *VataKapha Shamaka* drug as it has antiviral, antibacterial, antioxidant, and antihemorrhagic qualities. These properties make the medicine more potent in removing the chronic inflammation and fibrosis. As this is the single case study it should be tried in more number of patients for its validation.



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