

TO STUDY HETU & SAMPRAPTI OF BENIGN PROSTATIC HYPERPLASIA IN GERIATRICS - AN OBSERVATIONAL STUDY

Mansi Gupta^{1*}, Pallavi L. Dand², A. A. Muke³

¹M.D. Scholar, ²Associate Professor, ³H.O.D;

Department of Roganidana Evam Vikriti Vigyana, Bharati Vidyapeeth (Deemed to be University) College of Ayurved, Pune, Maharashtra, India

Email: mansidrgupta@gmail.com

ABSTRACT

Benign Prostatic Hyperplasia, also called prostate enlargement has a significant impact on the quality of health of elderly man. *Ayurved* provides a treasure of insightful tools that can be used to assess any diseased condition and thus by identifying the disease root it ultimately helps to reclaim the health. *Hetu, Dosha, Dushya* identification is the first step in diagnosis of any disease in *Ayurved*. This research work intends to identify food and lifestyle related causative factors of Benign Prostatic Hyperplasia and in turn wants to establish a relation between causative factors and factors involved in disease progression in *Ayurvedic* perspective in Geriatric patients. **Aim & Objectives:** To Study *Hetu & Samprapti* Of Benign Prostatic Hyperplasia in Geriatrics; An Observational Study. **Type of Study-** Retrospective observational study. **Source of Data-** Diagnosed patient of BPH by USG (Abdomen pelvis/prostate) with symptoms of BPH **Subjective Parameters:** The patients presenting following LUTS (Lower Urinary tract symptoms) attributed to prostate problem will be considered for study: Feeling of incomplete bladder emptying, Frequency of urine, Intermittency, Urgency of urine, Weak stream, Strainful micturition, Nocturia. **Objective Parameter:** International prostate symptoms score is used for charting disease severity. Patients above 60 years of age will be taken for study. Sample size for the study is 15 patients. **Place of Study:** Bharati Vidyapeeth (Deemed to Be University) *Ayurved* Hospital, Pune– 411043. **Observations & Discussion:** *Dosha- VatapradhanTridosh; Dushya- Srotas- Mutravaha, Mamsavaha, Medovaha, Ojovaha, Raktavaha, RasavahaSrotas, Dhatu- Mamsa, Meda, Shukra, Rakta; Manas- Chinta, Shoka; Agni- Visham; Mala- Mutra, Purisha. Conclusion:* *Aahar, vihar & manas hetu* are responsible for manifestation of BPH.

Keywords: Hyperplasia, voiding, geriatric

INTRODUCTION

Benign Prostatic Hyperplasia, also called prostate enlargement is one of the important age-related ailments affecting the quality of ageing process in male. It is the most common cause of lower urinary tract symptoms which are divided into storage, voiding & symp-

tombs which occur after urination. Current medication on BPH can improve the symptoms to some extent but they cannot control the development of prostatic hyperplasia. Once the medication is stopped, symptoms will become more serious. In the end, patients will

likely need surgical intervention which can lead to debilitating consequences. This disease has a significant impact on the quality of health of elderly man. *Ayurved* provides a treasure of insightful tools that can be used to assess any diseased condition and thus by identifying the disease root it ultimately helps to reclaim the health. *Hetu, Dosha, Dushya* identification is the first step in diagnosis of any disease in *Ayurved*. This research work intends to identify food and lifestyle related causative factors of Benign Prostatic Hyperplasia and in turn wants to establish a relation between causative factors and factors involved in disease progression in *Ayurvedic* perspective in Geriatric patients.

Need of Study: According to previous review, Naidanik aspect of BPH in Geriatric patients is not much highlighted and studied. This work is surely beneficial to suffering elderly individuals to reduce symptoms, to stop further progression and complications & also to normal individuals to avoid painful conditions of BPH in near future.

Aim: To Study *Hetu & Samprapti* Of Benign Prostatic Hyperplasia in Geriatrics; An Observational Study

Objectives

- Proposed research study presents following objectives in *Ayurvedic* perspective in geriatric patients.
- Study *Hetu, lakshanas & dosha-dushya* involved in BPH.

Methodology: Type of Study- Retrospective observational study. **Source of Data-** Diag-

nosed patient of BPH by USG (Abdomen pelvis/prostate) with symptoms of BPH.

Inclusion Criteria: Male Patients above 60 years of age diagnosed with Benign Prostatic Hyperplasia by U.S.G (abdomen pelvis/prostate) showing enlargement of prostate and per rectal examination indicating prostate smooth and without nodules with clearly defined median sulcus will be taken for study. Patients presenting with lower urinary tract symptoms (LUTS) attributed to Prostate problems will be taken for study.

Exclusion Criteria: Diagnosed patients of carcinoma prostate. Patients having any of the following sonographic criteria for prostatic carcinoma- well- circumscribed hypoechoic regions, external asymmetry of the gland, increase in anterior posterior diameter ratio, irregularity of the prostatic capsule. Diagnosed patients of prostate abscess, prostatic cyst and prostatitis. Subjects with any major medical or surgical illness especially related to prostate enlargement.

Subjective Parameter: The patients presenting following LUTS (Lower Urinary tract symptoms) attributed to prostate problem will be considered for study: Feeling of incomplete bladder emptying, Frequency of urine, Intermittency, Urgency of urine, Weak stream, Strainful micturition, Nocturia.

Objective Parameter: International prostate symptoms score is used for charting disease severity.

Score Severity: 1-7 Mild;8-19 Moderate;20-35 Severe. **Place of Study:** Bharati Vidyapeeth (Deemed to be University) Ayurved Hospital, Pune- 411043

OBSERVATIONS: Table 1.1: Division of Patients According to Age Distribution

Age	Number of Patients	% of Patients
60-70	9	60%
70-80	6	40%
80-and above	0	0

Age: 60-70(60%), 70-80(40%), 80 And Above (0%)

Table 1.2: Assessment of Symptoms by International Prostate Symptom Score

Severity	Score	Number of patients	% of patients
Mild	1-7	0	0
Moderate	8-19	3	20
Severe	20-35	12	80

Severity: Mild (0%), Moderate (20%), Severe (80%)

Table 1.3: Assessment of Symptoms by Prostate Volume

Grade	Volume	Number of patients	% of patients
Grade I	21-30cc	3	20
GRADE II	31-50cc	9	60
GRADE III	51-80cc	2	13.3
GRADE IV	80cc& above	1	6.67

Grade: I (20%), Ii (60%), Iii (13.3%), Iv (6.67%)

BPH in Ayurvedic Perspective

Table 1.4: Division of Patients According to their *Prakruti*

Doshaprakruti	Number Of Patients	% Of Patients
Vatapittaj	7	46.66%
Vatakaphaj	7	46.66%
Pittavataj	1	6.66%

Doshaprakruti: Vatapittaj (46.66%), Vatakaphaj (46.66%), Pittavataj (6.66%)

BPH- Lakshanas

Table 1.5: Assessment of *Mutravaha Srotas Lakshanas*

Lakshanas	Score
Varamvar Mutrapravrutti	39
Alpaalpa Mutrapravrutti	42
Muhurmuhumutrapravrutti	44
Sakashta Mutrapravrutti	48
Nakta Mutrata	29
Aniyantrit Mutrapravrutti	42

Mutrpravrutti: Varamvar (39), Alpaalpa (42), Muhurmuhu (44), Sakashta (48), Nakta Mutrata (29), Aniyantrit (42)

Table 1.6: Associated *Lakshanas* Observed in BPH

Symptoms	No of Patients	% of Patients
Karshya	12	80%
Udarshoola	12	80%
Daurbalya	11	73.3%
Trishna	11	73.3%
Anannabhilasha	8	53.3%
Ashradha	8	53.3%
Malavashtambha	8	53.3%
Sandhishoola	7	46.7%

Symptoms: Karshya (80%), Udarshoola (80%), Daurbalya (73.3%), Trishna (73.3%), Anannabhilasha (53.3%), Ashradha (53.3%), Malavashtambha (53.3%), Sandhishoola (46.7%)

Table 1.7. Assessment of Oja

<i>Lakshan</i>	Number of Patients	% of Patients
<i>Bhaya</i>	6	40%
<i>Daurbalya</i>	11	73.3%
<i>Vyathit Indriya</i>	8	53.3%
<i>Loss Of lusture</i>	8	53.3%
<i>Unstable Mind</i>	4	26.7%
<i>Raukshya</i>	8	53.3%

Lakshan: Bhaya (40%), Daurbalya (73.3%), Vyathit Indriya (53.3%), Loss of Lusture (53.3%), Unstable Mind (26.7%), Raukshya (53.3%)

Assessment of Hetu**Table 1.8** Assessment of *Aahar* in Patients

<i>Aahar Rasa</i>	Number of Patients	% of Patients
<i>Madhur</i>	3	20%
<i>Amla</i>	9	60%
<i>Lavan</i>	2	13.3%
<i>Katu</i>	8	53.3%
<i>Tikta</i>	2	13.3%
<i>Kashaya</i>	2	13.3%

Aahar Rasa: Madhur (20%), Amla (60%), Lavan (13.3%), Katu (53.3%), Tikta (13.3%), Kashaya (13.3%)

Table 1.9: Assessment of *Aahar* Type

<i>Aahar Type</i>	Number of Patients	% of Patients
<i>Vidahi</i>	6	40%
<i>Viruddhak</i>	9	60%
<i>Paryushit</i>	8	53.3%
<i>Viruddha</i>	9	60%
<i>Bakery</i>	6	40%
<i>Excess Oily</i>	6	40%
<i>Mix Diet</i>	7	46.7%

Aahar Type: Vidahi (40%), Viruddhak (60%), Paryushit (53.3%), Viruddha (60%), Bakery (40%), Excess Oily (40%), Mix Diet (46.7%).

Table 1.10: Assessment of *Aahar –Sevan Kala Evam Matra*

Meal Timing	Number of Patients	% of Patients
Regular	6	40%
Irregular	9	60%
<i>Alpashan</i>	12	80%

Meal Timing: Regular (40%), Irregular (60%), *Alpashan* (80%)

Table 1.11. Assessment of *Viharaj Hetu*

Occupation	No. of Patients	% of Patients
Farmer	5	33.33%
Factory Worker	2	13.33%
Security Guard	1	6.66%
Cobbler	1	6.66%
Autodriver	1	6.66%
Employee	2	13.33%
Tailor	1	6.66%
Feriwala	1	6.66%

Occupation: Farmer (33.3%), Factory Worker (13.33%), Security Guard (6.66%), Cobbler (6.66%), Autodriver (6.66%), Employee (13.33%), Tailor (6.66%), Feriwala (6.66%)

Table 1.12. Pattern of Sleep

<i>Nidra</i>	Number of Patients	% of Patients
<i>Khandit Nidra</i>	13	86.66%
<i>Late Sleep</i>	2	13.3%
<i>Bhojanpaschat Diwaswaap</i>	15	100%

Nidra: Khandit Nidra (86.66%), Late Sleep 13.3%), Bhojan Paschat Diwaswaap (100%)

Table 1.13: *Vegavrodh*

<i>Vegavrodha</i>	Number of Patients	% of Patients
<i>Mutravegavrodh</i>	11	73.3%
<i>Purishvegavrodh</i>	8	53.3%
<i>Kshudhavegavrodha</i>	1	6.67%

Vegavrodha: Mutra (73.3%), Purish (53.3%), Kshudha (6.67%)

Table 1.14. *Manas Hetu*

<i>Manas Hetu</i>	Number of Patients	% of Patients
<i>Chinta</i>	9	60%
<i>Bhaya</i>	3	20%
<i>Krodha</i>	2	13.3%
<i>Shoka</i>	8	53.3%

Manas Hetu: Chinta (60%), Bhaya (20%), Krodha (13.3%), Shoka (53.3%)

Table 1.15: *Vyasan*

<i>Vyasan</i>	Number of Patients	% of Patients
<i>Tobacco</i>	7	46.7%
<i>Smoking</i>	1	6.67%
<i>Supari (Puga)</i>	1	6.67%
<i>Alcohol</i>	12	80%

Vyasan: Tobacco (46.7%), Smoking (6.67%), Supari (6.67%), Alcohol (80%)

Table 1.16. Dosha

Dosha	Number of Patients	% Of Patients
Vatapitta	11	73.3%
Vatakapha	4	26.7%

Dosha: Vatapitta (73.3%), Vatakapha (26.7%)

Table 1.17: Srotodushti Hetu & Lakshanas

Srotas	Number of Patients	% of Patients
Rasavahasrotas	11	73.3%
Raktvahasrotas	11	73.3%
Mamsavahasrotas	15	100%
Medovahasrotas	12	80%
Shukra-Ojovahasrotas	15	100%
Mutravahasrotas	15	100%
Manovaha Srotas	13	86.66%
Annavahasrotas	9	60%

Srotodushti: Rasa (73.3%), Rakta (73.3%), Mamsa (100%), Meda (80%), Shukra-Oja (100%), Mutra (100%), Mano (86.66%), Annava (60%)

Table 1.18. Assessment of Agni

Agni	Number of Patients	% of Patients
Vishamagni	11	73.3%
Mandagni	4	26.7%
Tikshanagni	0	-

Agni: Vishamagni (73.3%), Mandagni (26.7%) Tikshanagni (-)

Table 1.19. Dhatu Dushti

Dhatu	Number of Patients	% of Patients
Rasadhatu	11	73.3%
Raktadhatu	11	73.3%
Mamsadhatu	15	100%
Medadhatu	12	80%
Shukradhatu	15	100%

Dhatu: Rasa (73.3%), Rakta (73.3%), Mamsa (100%) Meda (80%), Shukra (100%)

DISCUSSION

As this study is concerned with geriatric age group, *Vatapradhanlakshanas* are seen. *Malavashtambha* was found in 53.3% patients & indicate *Apanvayuvikruti* which is also one of the causes for *Mutravaha Srotas lakshanas*.²

As prostate is a male accessory sex organ and it secretes fluid that nourishes and protects sperm, *Oja Parikshan* is carried out specially in all patients to

assess *Shukra dhatu*. As *Oja* is essence of *Saptadhatu and Upadhatu of Shukra*, its functions in Geriatric age group patients are observed. Assessment results in *Ojakshaya Lakshanas* in all BPH patients shows involvement of *Shukra and Oja* in BPH in Geriatric patients.

Assessment of Aaharaj Hetu

Amla Rasa atisevan leads to *pitta prakop, Raktadushti, Mamsavidaha, Shotha in kshina, krusha, dur-*

balvyakti. Vitiating Pitta, Rakta, Mamsa along with other viharajhetu create Mutramargavikruti. Excess consumption of katu rasa causes depletion in Punsat-washakti and vatajanyavikar. As prostate is male accessory sex gland; atisevan of Katu rasa along with other aaharaj & viharajhetu results in Shukra – Oja Dusti in this study. Viruddhakaahar results in vitiation of VataDosha. Vitiating Vata along with other Hetu results in Bastipradesh Aadhman, Alpalpa, Muhurmuhu, Sakashta Mutrapravrutti in Geriatric group BPH patients. Viruddhakaahar causes Raktadushti, Shukradusti, Shotha & Adhman. Paryushit Anna is guru, ruksha, & sheet results in vitiation of vataKaphadosha and Annavaha Srotas Dushti along with other Hetu contributes in Vyadhi Samprapti.

Mix diet is mainly of katurasadhikya, it vitiates vata-Dosha in Body. As it is heavy for digestion it creates Annavaha Srotas Dushti. Abhishyandiaahar is hetu for MamsavahaSrotas Dushti, kaphaprakop, Srotorodha. Irregular meal timing causes Agnidushti and further AnnavahaSrotasDushti contributes in VyadhiSamprapti

Assessment of Viharaj Hetu

Patients doing physical work are more in number. Atishram in JaraAvastha results in VataPrakopa. Along with other Hetu it contributes in causing dusti in Mutra Marga. Bhojanpaschatdiwaswaap causes Mamsavaha Srotas Dushti, Khanditnidra leads to Vataadhikya. Vegavarodh causes Vataprakop. Mutravegavrodha results in Mutravahasrotasdushti.²
Manas Hetu: Chinta is Hetu for Rasavahasrotodushti. Chinta, Shoka, Bhaya leads to Shukravaha Srotas Dushti.

Vyasan: Alcohol consumption was found to be a major Hetu in assessment of Vyasan category & it results in OjaKshobha as follows-

Laghu, Ushna, Tikshnaguna Srotogamitwa Of Madya causes Kshobha in Oja; Madya creates Mana Kshobha; Madyasevan also creates Medovaha Srotasdushti; Madya Sevan leads to RaktaDushti; Madya Sevan is one of the Hetu for Mutravaha Srotas Vyadhi. Thus, Alcohol consumption is one of the important contributing factor in BPH.

Dosha: Patients with vatapittadosha were 73.3% & patients with vataKaphadosha were 26.7%.

Observation shows Vatapradhan Dusti. Atikaturasa Sevan, Alpashan, Virudhak anna, Mutravegavarodh, Atishram and JaraAvastha itself leads to Vata vitiation in body. Vitiating Vata creates Mutramarga Vikruti. It results in Vyasa, Adhman, Shotha near basti & Gudapradesh, which further reflects in Lakshanas like Muhurmuhu, Alpalpa, Sakashta, varamvar Mutrapravrutti.

Srotodushti Hetu & Lakshanas: MutravahaSrotas Dushti^{3,1} (100%)- Mutraveganigraha, dhatukshnita, madyasevan, atishram results in Mutravaha SrotasDushti. It reflects in srotodushtilakshanas like muhurmuhu, alpalpa, varamvar, sakashtamutrapravrutti, Mamsavaha Srotas Dushti (100%)- Abhishyandibhojan, bhojanpaschatdiwaswaap, gurmix diet was found as main hetu. Srotodushti mainly results in Granthivruddhi in Mutramarga in BPH patients.

Shukravaha-OjavahaSrotodushti^{2,1}(100%) -

AtiAmlarasasevan, JaraAvastha, Chinta, Shoka, Bhaya, Madya Sevan are the main hetus found for ShukravahaSrotasDushti.

Oja is Upadhatu of Shukra Dhatu. Dhatu Kshinata, Shoka are the Hetus found to cause Ojodushti Srotodushti results in indriyakarmahani, daurbalya, loss of lusture, increased fear psychology, unstable mind, increased raukshya in BPH patients.

MedovahaSrotodushti¹ (80%)- Divaswaap, Madyasevan was found as a main hetu for Medovaha Srotodushti which contributes in Granthi in BPH along with other Hetus.

Raktavahasrotodushti¹ (73.3%)- Amlarasaatisevan, Viruddha anna sevan, Madya sevan are major hetu causing Raktavaha Srotodushti which contributes along with other hetu in manifestation of Granthi in BPH patients.

RasavahaSrotodushti¹ (73.3%)- Atigurusevan, AtiChinta, Atishram leads to Rasavaha Srotodushti results in Lakshanas Like Ashraddha, Krushata.

Annavaha Srotodushti¹ (60%)- Akalbhojan, Mix diet leads to Annavaha Srotodushti which results in Annabhilasha, Arochak

ManovahaSrotodushti¹ (86.66%)- As BPH affects quality of life of suffering individuals, *Chinta, Shoka, Bhaya*; these *Manas Bhavas* are found to be affected mainly.

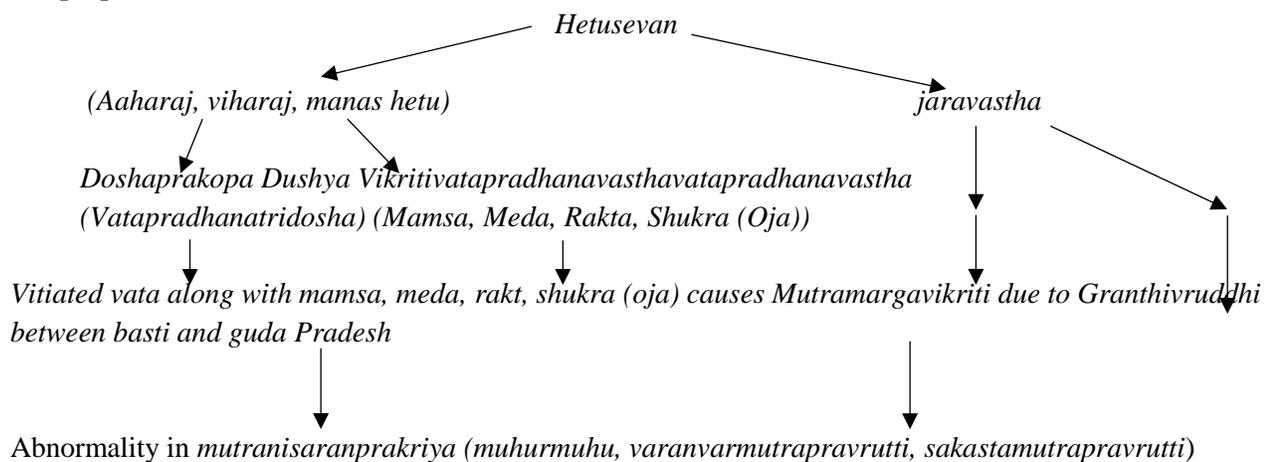
Assessment of Agni: *Vishamagni* is found in 73.3% patients & *mandagni* is found in 26.7% patients.

Dhatu Dushti: Observation Shows *Mamsadhatudushti* in 100%, *Shukradhatudushti* in 100%, *Medadhatudushti* 80%, *Rasadhatudushti* in 73.3% patients.

Results:

Dosha- *Vatapradhan Tridosh*; **Dushya-** *Srotas-Mutravaha, Mamsavaha, Medovaha, Ojovaha, Raktavaha, RasavahaSrotas, Dhatu- Mamsa, Meda, Shukra, Rakta*; **Manas-** *Chinta, Shoka*; **Agni-** *Visham*; **Mala-** *Mutra, Purisha*

Samprapti



CONCLUSION

In BPH study: *Ojakshayalakshanas* like *daurbalya, vyathitindriya, loss of lusture, bhaya, unstable mind, raukshya* clarifies significant role of *Oja Dushti* in manifestation of BPH. *Amla, Katu rasa Atisevan, Virudhakaahar, Viruddhaaahar, Paryushitaahar*, mix diet, *Aniyamit Aharsevankal* are the main *Aaharajhetu* & so these are to be given in limited quantity to decrease the symptoms of disease manifestation. Physical work is to be done in moderate quantities to minimise the impact of disease symptoms in BPH patients. Alcohol intake & chewing of tobacco are seen to promote the risk factor of this disease & need to be avoided and stopped immediately. Thus, this work will provide basic guideline to understand BPH in Ayurvedic perspective.

REFERENCES

1. Dr. PS Byadgi, *Ayurvediya Vikriti Vijnana & Roga Vijnana*, Chaukhamba Publications, Edition 2011, Volume 2, Ch 16, Pg 306-313.
2. Dr. PS Byadgi, *Ayurvediya Vikriti Vijnana & Roga Vijnana*, Chaukhamba Publications, Edition 2011, Volume 1, Ch16, Pg306-313.
3. Prof. K.R. Srikanth Murthy, Editor, *Ashtang Hrudya*, Chaukhamba Orientalia, Reprint Edition 2016, Ch4., Page45-47.

Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Mansi Gupta et al: To Study Hetu & Samprapti Of Benign Prostatic Hyperplasia in Geriatrics - An Observational Study. *International Ayurvedic Medical Journal* {online} 2019 {cited January, 2020} Available from: http://www.iamj.in/posts/images/upload/2380_2387.pdf