



EFFICACY OF GOKSHURADYA GHRITHA IN VATASHTTEELA W.S.R TO BENIGN PROSTATIC HYPERPLASIA : A REVIEW

Ayurveda

Anuroop I.V	Assistant Professor, Shalya Tantra, Sri Jayendra Saraswathi Ayurveda College and Hospital, Nazarethpettai, Chennai-600123
Revathy Prasad	Assistant Professor, Kaya Chikitsa, Government Ayurveda College Hospital, Trippunithura, Ernakulam, Kerala
K. Vasudeva Reddy	Professor, Shalya Tantra, Sri Jayendra Saraswathi Ayurveda College and Hospital, Nazarethpettai, Chennai- 600123
T. Udaya Kiran	Professor and HOD, Shalya Tantra, Sri Jayendra Saraswathi Ayurveda College and Hospital, Nazarethpettai, Chennai-600123

ABSTRACT

The management of benign prostatic hyperplasia through Ayurveda is a vast area where various searches are going on in order to find out an ideal drug which is effective both therapeutically as well as economically. The present study focuses on the efficacy of *Gokshuradya ghritha*, a classical formulation which is administered in various ways in the management of *Vatashteela* [i.e. benign prostatic hyperplasia (BPH) which is one of the most common urinary disorders mentioned in *Mutraghata chikitsa* where urine flow is reduced due to obstruction in the urinary passage]. Benign prostatic hyperplasia commonly affects males usually in 60 to 70 years of age. In this study, using appropriate key words and filters a complete literature review was done. The data received was properly analysed and results were interpreted. Based on this data it is very much evident that *Gokshuradya ghritha* has got significant potential in curing *Vatashteela* when used individually or in combination with other medicines.

KEYWORDS

Vathashteela, Mutraghata, Gokshuradya ghritha, Benign prostatic hyperplasia

INTRODUCTION:

Acharya Susrutha clearly mentioned *Mutraghata* in *Susruta Samhita Chikitsa Sthana*. *Vatashteela* falls under the 12 kinds of *Mutraghatarogas*.⁶ The term *Mutraghata* contains two words i.e; '*mutra*' and '*aghata*' which means urine outflow obstruction.¹³ While going through the symptoms, it is evident that *Vatashteela*⁵ closely resembles the present day condition, Benign prostatic hyperplasia. *Vatashteela* is characterised by '*Ashtelavai granthi*'⁴ which is enlarged in size and immobile causing urine outflow obstruction. The same pathology is seen in BPH where the prostate gland attains an increase in its own size than normal producing a compression effect over the prostatic part of urethra leading to obstruction in urine flow. These show that in ancient times also *Vatashteela* was diagnosed and treated well.

BPH occurs in men mostly after 50 years of age.¹⁵ Here, the enlarged prostate produces urine outflow obstruction leading to acute retention of urine. In BPH, both the connective tissue stroma and the glandular epithelium are affected.¹⁴ The most common and widely accepted theory in the pathogenesis of BPH is androgen ageing theory, where testosterone is converted in to more potent dihydrotestosterone [DHT]. This DHT further stimulates the hyper proliferation of glandular epithelium and stromal cells of prostate.¹⁵

The symptoms of BPH include frequency [It is the most common and earliest symptom where patient gets up twice or more during night time for urination], urgency [Intense desire to urinate], hesitancy [The patient has to wait for sometime in order to begin micturition], weak stream, dribbling towards the end of micturition, haematuria [Due to rupture of dilated veins at the base of bladder].¹⁶ The standard line of treatment includes surgical intervention [TURP]. But there is always chance of complications in old age. The major complication of prostatectomy is recurrence of the condition. Retrograde ejaculation, erectile dysfunction, impotence, clot retention, stricture, incontinence and infection are the other complications.¹³ Hence, one can reach the conclusion that a method of treatment which is relatively less invasive should be needed. In this context, the conservative management through Ayurvedic classical medicine '*Gokshuradya ghritha*' becomes relevant.

Acharya Susrutha mentioned various aetiological factors under *aharaja* and *viharaja nidanas*. The *aharaja nidanas* are *ajeerna* [indigestion], *adhyasana* [excessive food intake], *anoopamamsa matsya*, *athitheekshnarookshadraya sevana*, *madyapana*, *rooksha guru anna*.¹⁶ The *viharaja nidanas* are *vegadharana* and *vegodeerana* of *mala-mootra-sukra adhovata*, *athivayama*, *prasanganitya*,

athidrutaprishtayana, *yana asana sthanachamkrmana athisevana*, etc. Most of the above said causes can be observed in men of modern era, especially suppression of urine and faeces due to nature of job, long distance travel etc. The intake of spicy junk foods, preservatives, alcohol etc. are also common nowadays.

For treating *Vatashteela*, *Acharya Susrutha* mentioned a general treatment line which includes formulations like *kashaya*, *kalka*, *sarpi*, *bhakshya*, *leha*, *payas*, *kshara*, *madya* and *asava*.³ He also explains the importance of normalcy of *Apana Vayu* [*Apanapragunatha*] which is essential for the normal urine outflow. Abnormality [*Apanavigunatha*] is the root cause behind majority of the *mutraghata rogas*.³ He also describes the importance of *Swedana*, *Vasthi karma* and *Utharavasthi karma* etc; in different stages of management.³

METHODS

Literary research was done based on various articles published on PUBMED, SCOPUS, AYUSH PORTAL AND GOOGLE SCHOLAR with key words like BPH, *VATASHTTEELA*, *MUTRAGHATA* and *GOKSHURADYA GHRITHA*. Collection of data was done from Ayurvedic classical texts, reputed published and peer reviewed journals and modern medical text books. Based on the findings collected from various clinical studies, case studies and review studies, the importance of *Gokshuradya ghritha* in BPH management is well understood.

RESULTS

Bhuyan et al in their study '*Gokshuradi Vati and Dhanyaka-Gokhura ghritha Matra Basti* in the management of Benign prostatic Hyperplasia' they find out that *Dhanyaka-Gokshura ghritha Matra Basti* showed highly significant result in average urine flow rate and also in the reduction in the size of enlarged prostate gland.⁷ Jaiswal et al in their study '*A clinical study on Dhanyak Gokshur Ghritha Yavakshar Uttarbasti* in the management of *Mutraghata* w.s.r to Benign Prostatic Hyperplasia' they proved that the combination of both *ghritha* and *kshara* used in *Uttar basti* is very effective in reducing the symptoms like increased frequency, nocturia, weak stream and incomplete voiding.¹¹ The average urine flow rate was increased and the prostate size and residual urine volume were decreased. Jaiswal et al in their study '*Karkatibeejadi churna and Dhanyak-Gokshura Ghritha Matra Basti* in the management of Benign Prostatic Hyperplasia-Case study' they reached in the conclusion that *Dhanyaka Gokshura Ghritha* produced highly significant relief in incomplete voiding, intermittency, hesitancy, nocturia, urgency and weak urine stream.¹² While *Karkatibeejadi choorna* provides very significant results in urgency and nocturia. Rajagopala et al in their study '*Effect of Mahayavanala*

Roma Kshara and Dhanyaka Gokshura Ghrita in benign prostatic hyperplasia' it is evident that *Dhanyaka Gokshura Ghrita* is very effective in curing symptoms when taken internally as compared to *Mahayavanala Roma Kshara*.⁸ Patel et al in their study *Dhanyaka Gokshura Ghrita Matra Basti in the management of Benign Prostatic Hyperplasia-A case Study*, they find out that *Dhanyaka Gokshura Ghrita Matra Basti* is very effective in the management of Benign Prostatic Hyperplasia without any side effects.⁹

DISCUSSION

Among geriatric population BPH is a growing health problem. Due to its specific symptoms it affects the quality of life of individual. *Gokshuradya ghrita* mentioned in *Yogarathnakara* in the context of *mutraghata* contains only two ingredients i.e. *Gokshura* and *Dhanyaka*.¹ The *ghrita* is prepared using the two ingredients as *kalka* and *kashaya*. *Gokshura* is well known for its Analgesic, Anti inflammatory, Anti spasmodic, Anti tumor and diuretic activity.¹⁰ Beta Sito-sterol, a fatty acid present in *Gokshura* is proven to be Anti inflammatory.¹⁷ Beta Sito-sterol is very effective in preventing prostate carcinoma.²¹ Diosgenin is another component showing Anti proliferative activity.¹⁸ Hence diosgenin plays a major role in controlling the proliferation of prostatic stromal and epithelial cells in BPH along with its Anti oxidant nature.²⁵ In some investigations of BPH cases, low levels of LH [Luteinizing hormone] is seen.¹⁹ Another study proved that *Gokshura* shows an increase in the LH hormone levels²⁰ which is in direct connection with testosterone levels. The phyto chemicals such as protodioscin, dioscin and diosgenin etc.. increases the testosterone levels in men and it also affect the oestrogen hormone levels.²¹ Also one alkaloid present in *Gokshura*, Harmine [monoamine oxidase inhibitor] plays a major role in increasing dopamine levels in brain which is directly related with sexual arousal in men.²² From all these evidences it is clear that *Gokshura* is the best drug of choice in treating erectile dysfunction seen in BPH patients.²³ *Dhanyaka* is *srotho visodhana*.⁴ According to one study *Dhanyaka* is a very potent 5- α reductase inhibitor.²⁶ Hence the conversion of testosterone in to DHT is prevented. is Using both these drugs *ghrita* is prepared and when it is administered in the form of *utharabasti* and *matrabasti*⁹ due to the *yoga vaahi* nature of *ghrita*, the medicine reaches the *Muthravaha srothas* quickly and produces favourable results.

CONCLUSION

The present review focuses on the action of *Gokshuradya ghrita* in *Vatashteela* w.s.r to benign prostatic hyperplasia. As surgery is not sufficient in providing a permanent cure for the condition. When used in the form of *Matra Basti*, this formulation produces vata anulomanatwa by acting directly over the *Ashteelavath granthi* present between the rectum and urinary bladder. Ayurvedic classical medicine *Gokshuradya ghrita* is very much relevant in this scenario. This formulation is very effective in curing benign prostatic hyperplasia whether it is administered through oral route [internally], *Muthra marga* [*UtharaBasti*] or *Gudamarga*/Ano rectal route [*MatraBasti*]. As there are only two contents in it which are easily available, this *Ghrita* preparation seeks the attention to be the best alternative medicine for curing *Vatashteela* [BPH].

REFERENCES

1. Dr. Asha Kumari, Dr. P.V. Tewari, Yogaratnakara, Chaukhambhavisabharati, Varanasi, 2010, Vol.2, chapter 37, verses 48
2. P.V. Sharma, Susruthasamhita, Chaukhambhavisabharati, Varanasi, 2010 nidanasthana, Vol.2, chapter 3, verses 27-28
3. Susrutha, Susruthasamhita, Chaukhambhasans kritsamsthan, Varanasi, 2013, utharasthan, chapter 58, verses 27-28
4. Dravya Guna Vijnan. Sharma P. Varanasi; Chaukhamba Bharati Academy; 2006. p.322
5. Susrutha, Susruthasamhita, Chaukhambhasams kritsamsthan., Varanasi, 2013, utharasthan, chapter 58, verses 7-8
6. Susrutha, Susruthasamhita, Chaukhambhasans kritsamsthan, Varanasi, 2013, utharasthan, chapter 58, verses 3-4
7. Bhalodia SG, Bhuyan C, Gupta SK, Dudhamal TS. Gokshuradi Vati and Dhanyaka-Gokshura Ghrita Matra Basti in the management of Benign Prostatic Hyperplasia. Ayu. 2012 Oct;33(4):547-51.
8. Vasava YR, Bhuyan C, Rajagopala M, Gupta SK, Dudhamal TS. Effect of Mahayavanala Roma Kshara and Dhanyaka Gokshura Ghrita in benign prostatic hyperplasia. Ayu. 2010 Jul;31(3):332-7.
9. Patel JK, Dudhamal TS, Gupta SK, Mahanta VD. Dhanyaka Gokshura ghrita matra basti in the management of Benign Prostatic Hyperplasia - A case study. Ayurpharm Int J Ayur Alli Sci. 2013;2(7):233-236.
10. Tarique M, Ali T, Aziz I. Khar-e-khasak (Tribulus terrestris): An Unani medicine in the Management of Benign Prostatic Hyperplasia: A narrative review. International Journal of Unani and Integrative Medicine. 2022;6(3):08-12.
11. Jaiswal, S., Toshikhane, H., Dhule, M., & M, P. (2021). A Clinical case study on Dhanyak Gokshur Ghrita Yavakshar Uttar basti in the management of Mutraghata w.s.r. to Benign Prostatic Hyperplasia. *International Journal of Ayurvedic Medicine*, 12(2), 427-430.
12. Jaiswal AS, Yadav SR. Karkatbeejadi churma and Dhanyaka Gokshura Ghrita Matra

- Basti in the management of Benign Prostatic Hyperplasia-A Case Study. IJM. 2015 Sept 3(9).
- Bailey & Love's Short Practise of Surgery, 26th edition, Taylor and Francis Group, 2013, part 12, Page.No-1340-1346
- Robbins Basic Pathology, 8th edition, Elsevier, 2012, Chapter 18, Page.No-695-696
- Somen Das, A Concise Textbook of Surgery, 9th edition, Kolkata, 2016, Chapter 59, Page 1234.
- Agnivesa, Charaka Samhita, Chaukhambhaprakashan, Varanasi, 2014, Chikitsasthana, Chapter 26, Verses 2
- Wilt T, Ishani A, Stark G, MacDonald R, Mulrow C, Lau J. Serenoa repens for benign prostatic hyperplasia. Cochrane Database Syst Rev. 2002; 3:1423-1465.
- Cecile C, Bertrand L, Faraj T, Jean-Louis B. Induction of anti-proliferative effect by diosgenin through activation of P53 release of apoptosis-inducing factor (AIF) and modulation of caspase-3 activity in different human cancer cells. Cell research. 2004; 14(3): 188-196.
- G. L. Hammond, O. Lukkarienen, P. Vihko, M. Kontturi and R. Vihko, "The Hormonal Status of Patients with Benign Prostatic Hypertrophy: FSH, LH, TSH and Prolactin Responses to Releasing Hormones," *Clinical Endocrinology*, Vol. 10, No. 6, 1979, pp. 545-552.
- M. L. Kuhut, et al., "Ingestion of a Dietary Supplement Containing Dehydroepiandrosterone (DHEA) and Androstenedione Has Minimal Effect on Immune Function in Middle-Aged Men," *Journal of the American College of Nutrition*, Vol. 22, No. 5, 2003, pp. 363-371
- Akram M, Asif HM, Akhtar N, Shah PA, Uzair M, Shaheen G, Shamim T, Shah SA, Ahmad K. 2011. *Tribulus terrestris* Linn.: a review article. *Journal of Medicinal Plants Research* 5(16):3601-3605.
- Deole YS, Chavan SS, Ashok BK, Ravishankar B, Thakar AB, Chandola HM. 2011. Evaluation of anti-depressant and anxiolytic activity of Rasayana Ghana Tablet (A compound Ayurvedic formulation) in albino mice. *Ayu* 32(3):375-379.
- Gauthaman K. and Ganesan AP. 2008. The hormonal effects of *Tribulus terrestris* and its role in the management of male erectile dysfunction—an evaluation using primates, rabbit and rat. *Phytomedicine* 15(1-2):44-54.
- Tyagi RM, Aswar UM, Mohan V, Bodhankar SL, Zambare GN, Thakurdesai PA. 2008. Study of Furostenol Glycoside Fraction of *Tribulus terrestris* on Male Sexual Function in Rats. *Pharmaceutical Biology* 46(3):191-198.
- Zhu W, Du Y, Meng H, Dong Y, Li L. 2017. A review of traditional pharmacological uses, phytochemistry, and pharmacological activities of *Tribulus terrestris*. *Chemistry Central Journal* 11(1):1-16.
- JP3633699B2, Use of cilantro extract, 2005.