

DHANYAKA GOKSHURA GHRITA MATRA BASTI IN THE MANAGEMENT OF BENIGN PROSTATIC HYPERPLASIA – A CASE STUDY

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Abstract

A case of enlargement of prostate was treated with Dhanyaka Gokshura Ghrita Matra Basti (instillation of medicated ghee through rectum) 60 ml once daily for 21 days. The patient was assessed on the basis of International Prostate System Score and objective parameters. After completion of treatment, significant relief was observed in signs and symptoms of enlarged prostate. This case highlights the fact that it is possible to treat a case of Benign Prostatic Hyperplasia (BPH) with Matra Basti.

Key words: Benign Prostatic Hyperplasia; Dhanyaka Gokshura Ghrita; Matra Basti; Mootraghata.

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INTRODUCTION

The overall incidence rate of Benign Prostatic Hyperplasia (BPH) is 15 per 1000 men per year. The incidence of BPH is at least 50 % for all men at the age of 40 years and above. In India BPH is a common geriatric problem with an incidence of 92.97% (n=185) & 93.3% (n=200).^[1] BPH is a non malignant enlargement of the prostate gland caused by excessive hyperplasia of prostatic tissue and is the most common benign neoplasm of senile men. In modern medicine the management of BPH is either by conservative treatment using drugs (hormonal therapy, chemotherapy etc.) and finally surgical intervention (open prostatectomy, TURP, cryotherapy etc.).^[2] In case of hormonal therapy there are complications like loss of libido, impotence, gynecomastia. In old age the surgery is associated with postoperative complications like morbidity, impotence, retrograde ejaculation.^[3] In Ayurveda etiopathogenesis of mootraghata (syndrome of obstructive urinary symptoms) is deranged function of vayu, particularly apana vayu. Basti (matra basti) is an authentic treatment for vitiated vayu where no any strict restrictions are required.^[4] In pathogenesis of mootraghata mootravaha srotodushti leads due to vitiation of vata and kapha dosha. So, matra basti with Vata kapha Shamaka drugs may be helpful in reducing the size of the prostate and enhancing the tone of urinary bladder. So, in this case of BPH, the treatment with Dhanyaka Gokshura Ghrita Matra basti was tried..^[5]

Case history

A 73 year old male patient, of Vatakaphaja Prakriti, visited OPD of Shalya Tantra, I.P.G.T. & R.A. Hospital, Gujarat Ayurved University, Jamnagar on 11/1/2013 with complaints of incomplete emptying, frequency of micturation, urgency and weak stream. Patient had all these complaints since last 3 years and gradually became severe as per IPSS score. Patient was also suffering from

recurrent attack of retention of urine and required catheterization for two times. The per rectal (P/R digital) findings were suggestive of enlargement of left lobe, round shaped, smooth surface, upper border approachable, median groove palpable, fixed mobility, tenderness absent, free rectal mucosa, soft consistency and mild enlargement prostate size. After physical and local examination following investigation were carried out to confirm the diagnosis.

Investigations

The following investigations were carried out before and after the treatment to assess the effect of therapy.

1. USG- the size of prostate gland and Post-void residual urine (PVRU) volume
2. Manual measurement of Urine flow rate
3. Blood urea, Serum Creatinine, Serum PSA, Serum Testosterone

Preparation of trial drug

The ingredients of Dhanyaka Gokshura Ghrita (DGG) are Dhanyaka (*Coriandrum sativum* Linn.), Gokshura (*Tribulus terrestris* Linn.) and Ghrita (ghee). The trial drug Dhanyaka Gokshura Ghrita (DGG) was prepared as per the Ghrita kalpana mentioned in the classic.^[6] First of all, the kwatha was made by adding 16 times of water in the yavakuta of dhanyak and gokshura and then reduced it to ¼ by boiling it; after that the kalka was made and as per snehapaka kalpana, ratio was taken as 1:4:16 for dhanyaka & gokshura kalka, go-ghrita and dhanyaka - gokshura kwath respectively. Snehapaka was done up to madhyamapaka siddhi lakshanas.

Procedure of Matra Basti

Patient was kept nil orally before administration of matra Basti as this basti is expected to vata anuloman. It is also mentioned in text that matrabasti can be given at any time. Patient was asked to lie in left lateral position on table. The luke warm 60 ml DGG

was administered slowly and steadily through rectal route with plastic syringe and rubber catheter. After that patients advised to lie down in left lateral position for 10 minutes. The Matra Basti was given daily for 21 days.

DISCUSSION

The exact etiology of BPH is not yet clearly understood. The concept of nodular hyperplasia in pathology of BPH has been established but its exact cause is still not known clearly. In fact, the development of BPH is multi-factorial phenomenon as there is no strong evidence for risk factors like smoking, vasectomy, obesity or high alcohol intake for developing clinical features of BPH.^[7] The only true factors related to the development of the disease are age and hormonal status. In old age serum estrogen level is increased which acts on the hypothalamus, decreasing the secretion of Luteinizing hormone releasing hormone (LHRH) and hence, causing decrease in serum testosterone level. Moreover, steroid secreted by the adrenal cortex in aging male play part in disrupting balance between dihydrotestosterone (DHT) and local peptide growth factors thus increasing the risk of BPH.^[8]

In this case study, the patient was treated with matra basti of DGG for 21 days and it was observed with symptomatic relief in incomplete emptying, frequency of micturation, urgency, weak stream as per IPSS score. In this case the IPSS score before treatment was 25 with poor quality of life which is severely symptomatic. After completion of the treatment with Dhanyaka Gokshura Ghrita Matra Basti IPSS score was reduced to zero i.e. patient was asymptomatic with good quality of life.

The size of prostate before treatment was 56 cc in USG findings and there was no any change after completion of the treatment as there was a structural change and it is

expected that treatment can be avoid the further growth. In USG Post Voidal Residual Urine Volume (PVRU) before treatment was 25 cc which was reduced to 20 cc so it can be said that the function of detrusor muscle was improved by Matra Basti. The Average Urine Flow Rate was measured manually and was observed 0.66 ml/sec before treatment. The normal Average Urine Flow Rate is 15ml/sec which was reduced in BPH. After completion of treatment it was 2.33 ml/sec which indicates that the flow of urine is normal without obstruction and pressure. The serum PSA (Prostate Specific Antigen) was reduced after treatment (from 3.06 ng/ml to 2.69 ng/ml) which showed the effect of therapy. The serum testosterone is decreased in patients of BPH which was 3.68 ng/ml before treatment and increased to 6.06 ng/ml after treatment which proved effect of drugs and Matra Basti. The blood urea and serum creatinine was also decreased after treatment which shows that there is release of urinary obstruction. (Table 1)

Table 1: Investigations

Investigations	Before Treatment	After Treatment
USG* (Prostate Size)	56 cc	56 cc
USG (Post Voidal Residual Urine Volume)	25 cc	20 cc
Average Urine Flow Rate	0.66 ml/sec	2.33 ml/sec
Serum PSA**	3.06 ng/ml	2.69 ng/ml
Serum Testosterone	3.68 ng/ml	6.06 ng/ml
Blood Urea	63 mg/dl	26 mg/dl
Serum Creatinine	1.1 mg/dl	1.0 mg/dl

*Ultrasonography; ** Prostate Specific Antigen

In Ayurveda it is mentioned that Matra basti is choice of treatment for controlling vata dosha in all types of mootraghata. So, it can be said that the function of detrusor muscle of bladder might be improved by controlling Apana vayu with the help of matra basti. In this formulation, only two drugs (Dhanyaka and Gokshura) are used as kalka (paste form of herbs) and kwatha dravya (Liquid form of herbs); and pure cow's ghee as sneha dravya. In the classics it is clearly mentioned that the

management of mooltraghata, should be done by use of ghrita as sneha dravya in the forms of pana (orally), abhyanga (local application) as well as Basti (Per rectal administration of medicated preparation).^[9] Dhanyaka (*Coriandrum sativum* Linn.) and Gokshura (*Tribulus terrestris* Linn.) both drugs have linoleic acid and oleic acid as a chemical component. They are inhibitors of both 5- α reductase and α blockers activity.^[10] The inhibition of 5- α reductase controls the conversion of testosterone to Dihydrotestosterone (DHT). So controlling DHT ultimately controls the further growth of prostate gland and relief in the symptoms.

Gokshura has Beta Sitosterol, Diosgenin, Saponin etc. as a chemical element. It is scientifically proved that beta-sitosterol have anti-inflammatory effects (through interference with prostaglandin metabolism) and anti androgenic or anti estrogenic effect.^[11] It also directly inhibits the further growth of prostate gland. The active chemical component beta sitosterol in any herbal medicine is proved very effective in the management of BPH. The active principle Diosgenin has been proved as anti proliferative activity against prostate cancer cells.^[12] It also prevents estrogen receptor conditions like urinary incontinence and urogenital atrophy.^[13] Hence all these properties of the trial drugs and the action of basti would have helped to control the growth of prostate in the management of BPH in this case.

CONCLUSION

This case study highlighted the fact that classical treatment Matra Basti with Dhanyaka Gokshura Ghrita is definitely effective in management of mooltraghata without adverse effect. As this is a single case study, there is

need to conduct the study in more number of cases for a concrete conclusion.

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