

## EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.ejpmr.com

Research Article ISSN 2394-3211

**EJPMR** 

# EFFECT OF MARICH CHURNA IN THE MANAGEMENT OF BENIGN PROSTATIC HYPERPLASIA

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Article Received on 13/03/2020

Article Revised on 02/04/2020

Article Accepted on 23/04/2020

#### **ABSTRACT**

Benign prostatic hyperplasia (BPH) is a condition in men in which prostate gland is enlarged. It leads to various symptoms causing disturbance of voiding. These include Hesitancy, Urgency, increased frequency of micturition, Nocturnal micturition, Dysuria and urinary track infection sometimes. In Ayurveda it is closely resemble to *vatashteela* and the drugs having *Vata Kapha* pacifying action, *Shothahara* (anti-inflammatory) and *Mutrala* (diuretic) are recommended for its management. 10 Patients were selected irrespective of their religion, race, occupation etc. Tab. *Marich churna* 60 mg BD was given for 30 days. The patients were assessed on the basis of IPSS and objective parameters like urine flow, weight of prostate and residual urine flow. The observations and results were analysed. It highlights the fact that Tab. *Marich churna* is not much effective in the treatment of BPH.

KEYWORDS: BPH, Vatashtila, Marich churna.

## INTRODUCTION

Benign prostatic hyperplasia (BPH) is a senile enlargement of the prostate, adenoma, adenomyoma, benign prostatic hypertrophy and Nodular hyperplasia.[1] The overall incidence rate of BPH is 15/1000 men/year. The prevalence of histologically diagnosed prostatic hyperplasia increases from 8% in men aged 31-40 years, to 40-50% in men aged 51-60 years and to > 80% in men elder than 80 years. [2] BPH leads to various symptoms causing disturbance in voiding. These include Hesitancy, Urgency, Increased frequency of micturition, Nocturnal micturition, Dysuria and Urinary track infection sometimes. [3] It ultimately hampers the quality of life. In modern science, the management of BPH is either through surgical approach (prostatectomy, TURP, Cryosurgery etc) or by conservative treatment using drugs (eg. Hormonal therapy).<sup>[4]</sup> Both have their own drawbacks and complications. In Ayurveda, BPH has resemblance with *vatashtila*, which is a type of *Mutraghata* (Urinary retention).<sup>[5]</sup> Ayurvedic literature described the management of it, which includes various formulations & procedures. Among that *Marich churna* lekhaniya, vatakaphaghna, chhedaniya, shoshaghna. [6], Mutrala [7] and pramathi dravya. [8] It also have 5 alpha reductase inhibitor property<sup>[9]</sup>, anti-cancer & anti- inflammatory property.<sup>[10]</sup> Hence research work was planned to access the efficacy of Marich churna, which can be useful in the management of BPH.

#### AIMS AND OBJECTIVES

The aim of this study was to evaluate the clinical efficacy of Marich churna and to find cost effective and alternative ayurvedic remedy for the management of BPH.

### MATERIALS AND METHODS

Present clinical study has been carried out in the OPD and IPD level in the Shalyatantra department of Govt. Ayurved College, Osmanabad. Patients were selected irrespective of religion, race, occupation etc., fulfilling the selection & eligibility criteria and informed consent was taken.

#### Clinical study design

10 patients were selected.

Coated capsule of *Marich churna* 60mg BD with water daily after meal given for 30 days.

## Preparation of drug

Preparation of *Marich churna* was done by using standard method given in *Sharangdhar samhita*. [11]

## **Investigations**

In all patients, the following laboratory and radiological investigations were carried out before and after treatment

- 1. Routine hematological examination: CBC, HIV, HbsAg.
- 2. Biochemical examination of Blood sugar(R), Serum Creatinine, Blood Urea.
- 3. Routine and microscopic examination of urine.

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 USG abdomen and pelvis, post Voidal volume of urine.

#### Criteria for selection of patients

Inclusion criteria

- 1. Patients of mild, moderate, gross BPH having Prostate size upto 60 g.
- 2. Age of the patient between 50-80 yrs.

#### Exclusion criteria

- 1. Urethral stricture
- 2.Functional BOO (Bladder Outflow Obstruction) due to neurological conditions like CVA, Parkinsonism, Tebes Dorsalis, Disseminated Sclerosis, DM, Loss of Neuro vesicle co-ordination, Syringomyelia ,Alzheimer's disease.
- 3. Carcinoma of prostate.
- 4. Diverticulum of the bladder.
- 5. Systemic diseases such as uncontrolled hypertension, DM etc.
- 6. Trigone Hyperplasia
- 7. Disability due to old age & serious systemic illness.
- 8. Patients suffering from HIV and HbsAg
- 9. Acute retention of urine
- 10. Detrusor instability

### **Assessment Criteria**

Subjective Criteria

Improvement in the symptoms as per IPSS [12]

## Objective criteria

1. Changes in urine flow

Table 1: Gradation of urine flow rate

Urine flow rate( ml/sec)	Gradation
Normal or (≥15ml/sec)	0
11-14 ml/sec	1
7-10 ml/sec	2
3-6 ml/sec	3
0-2 ml/sec	4

## 2. Changes in residual urine volume.

Table 2: Gradation of post Voidal residual urine volume

Post Voidal residual urine volume	Gradation
Nil (up to 30ml)	0
31-60ml	1
61-90ml	2
91-120ml	3
>121ml	4

## 3. Changes in prostatic size assessed by USG study **Table 3: Gradation of prostate size (volume)**

Prostate size as per USG (gm)	Gradation
Up to normal (14-25 gm)	0
26-35 gm	1
36-45gm	2
46-55 gm	3
56-60 gm	4

#### Overall assessment criteria

Complete remission: 100% relief in subjective and objective findings.

Marked improvement: 76%-99% relief in subjective and objective findings.

Moderate improvement: 51%-75% relief in subjective and objective findings.

Mild Improvement: 26%-50% relief in subjective and objective findings.

Unchanged: Up to 25% relief in subjective and objective findings.

## **OBSERVATIONS AND RESULTS**

Table 4: Effect of treatment on IPSS

Score	<b>Before Treatment</b>	After Treatment
0-7	0	0
8-19	4	4
20-35	6	6
Total	10	10

Table 5: Effect of treatment on Urine flow.

Grade	<b>Before Treatment</b>	After Treatment
0	0	0
1	1	0
2	3	4
3	4	6
4	2	0
Total	10	10

Table 6: Effect of the Treatment on post Voidal residual urine volume.

Grade	<b>Before Treatment</b>	After Treatment
0	3	4
1	5	5
2	1	1
3	1	0
4	0	0
Total	10	10

Table 7: Effect of the treatment on weight of prostate.

Grade	Before Treatment	After Treatment
0	0	0
1	1	1
2	3	3
3	5	5
4	1	1
Total	10	10

#### **DISCUSSION**

In Ayurveda, signs & symptoms of BPH is closely resemble with *vatastheela* which is a type of *Mutraghata*. In this *vata dosha*, particularly *apana vayu dushti* is there and it also disturbs *kapha dosha* which affects to *mutravaha strotasa*.

In modern Science, The main hormone acting on prostate is testosteron, secreted by leydigs cells of testis. Testosteron converted to 1,5- dihydrotestosteron (DHT) by 5 alpha reductase enzyme which is more potent than

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testosterone and found in prostatic and perigenital skin.<sup>[13]</sup> Oestrogen may play an important role in disrupting the delicate balance between dihydrotestosteron (DHT) and local peptide growth factors and hence increases the risk of BPH.<sup>[14]</sup>

As Marich churna is Katurasa, Katuvipaka, ushnavirya, shoshana, chhedana, lekhana, pramathi dravya & Mutrala properties which helps in breaking the samprapti of vatashteela. It also have 5 alpha reductase inhibitor property, anti-cancer & anti- inflammatory property which stops the conversion of testosterone to 1,5 dihydroxytestosteron (DHT).

In this clinical trial we observed that there is reduction in IPSS score mildly but due to score range of IPSS, the patient stand in same group. In case of urine flow rate there is moderate increased after treatment and grades shifted towards improvement. There is decreased in residual urine volume but again due to score range it can't shifted to one group to another group and no improvement seen in weight of prostate.

#### **CONCLUSION**

Conclusion of this study is *Marich churna* 60mg BD is not much effective in improving signs & symptoms of BPH. It may be due to ineffectiveness of *Marich churna* in management of BPH or due to small dose of Marich churna.

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