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## Ayurvedic Management of Benign Prostatic Hyperplasia (bph)

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### ABSTRACT

#### Introduction

Benign Prostatic Hypertrophy is one of the major clinical conditions related with ageing process in men. The primary symptoms of BPH those are due to the prostate obstructing the urethra include hesitancy, poor prolonged flow and sensation of incomplete emptying. Secondary symptoms are urinary frequency, urgency of micturition and urge incontinence. It also affects the quality of life and causes physical and mental stress to the patient.

According to ayurvedic principles, vitiated kapha and vata doshas are responsible for the pathology of benign prostatic hyperplasia. Triphala guggulu is having kaphavata reducing and lekhana actions, Avagaha sveda reduce vitiated vata in basti region whereas Lodhra and Musta and Arjuna are having grahi and stambhana actions which reduce frequency of micturition. Considering all these facts, this treatment protocol is developed for the treatment of benign prostatic hyperplasia (bph).

#### Materials and Methods

Total 12 patients of benign prostatic hyperplasia were registered for this study. All the patients were given Triphala Guggulu 1gram three times a day with warm water and combination of lodhra 1gram + Musta 1 gram + Arjuna 1 gram three times a day with warm water in O.P.D. All the patients were advised to take Avagaha Svedana twice a day morning and evening with warm water. Total duration of the treatment was 30 days. All the patients were assessed before and after treatment by using international prostate severity score. Data were analyzed statistically by using student's "t" test.



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## Results

Straining was reduced by 66%, urine stream was improved by 60.38%, Intermittency was relieved by 59 % whereas 63.83% improvement was found in emptying of urinary bladder. Frequency of urine, urgency of urine and nocturia were reduced by 60.71%, 67.39% and 65.45% respectively. All these beneficial effects were statistically significant. Quality of life was improved by 65.38% which was also statistically significant. Out of 11 patients having maximum severity of the disease, 7 shifted in to moderately severe category and 4 shifted in to mildly severe category.

## Conclusion

Ayurved treatment protocol including triphala guggulu, combination of lodhra, musta and arjuna equal part and avagaha svedana is effective in reducing signs and symptoms of benign prostatic hyperplasia. No any adverse event of the treatment was reported.

## KEYWORDS

*Benign Prostatic Hyperplasia, Ayurvedic Treatment*



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## INTRODUCTION

Benign Prostatic Hypertrophy is one of the major clinical conditions related with ageing process in men. Volume of the prostate starts to increase by 2.4cm<sup>3</sup> per year from the age of 40 years<sup>1</sup>. The process begins in the periurethral zone and involves both glandular and stromal tissue to a variable degree of hyperplasia. Usually associated symptoms are noticed from 60 years of age, and about 50% of men over 80 years have urinary symptoms associated with BPH.

The primary symptoms of BPH those are due to the prostate obstructing the urethra include hesitancy, poor prolonged flow and sensation of incomplete emptying. Secondary symptoms are urinary frequency, urgency of micturition and urge incontinence. Patients may present acute urinary retention and develop a painful distended bladder.

If retention of urine becomes chronic, the bladder may slowly distend due to inadequate emptying over a long period of time. This can be characterized by pain-free bladder distension and may result in hydroureter, hydronephrosis and subsequent renal failure.

In addition to the mechanical effects of the enlarged prostate, clinical symptoms of lower urinary tract obstruction are also due

to smooth muscle-mediated contraction of the prostate.

It also affects the quality of life and causes physical and mental stress to the patient.

According to ayurvedic principles, vitiated kapha dosha is responsible for hyperplasia whereas smooth muscle contraction, hesitancy, poor prolonged flow, sensation of incomplete emptying, urinary frequency, urgency of micturition and urge incontinence are result of vitiated vata dosha. Triphala guggulu is having lekhana action because of higher proportion of guggulu which is useful in reducing extra growth of the muscle tissues<sup>2</sup>. Avagaha sveda, which reduce vitiated vata in basti region can be useful in relieving spasm of smooth muscles of prostate and hence relieve the symptoms related to difficulty in micturition<sup>3</sup>. Lodhra<sup>4</sup> and Musta<sup>5</sup> have grahi action whereas Arjuna has stambhana<sup>6</sup> action and it is used in the treatment of mutraghata<sup>7</sup> hence combination of these three is useful in reducing frequency of micturition. Considering all these facts, this treatment protocol is developed for the treatment of benign prostatic hyperplasia (bph).

12 patients of BPH have been registered for the study. Symptoms before and after the



treatment are scored on the international prostate symptom score. Results are analyzed statistically.

## AIMS AND OBJECTIVES

1. To establish the efficacy of the Ayurvedic preparations in the management of BPH
2. To establish role of ayurvedic management in ensuring a better quality of life in the patients of BPH.

## MATERIALS AND

## METHODS

### SELECTION OF THE PATIENTS

All the patients were selected from O.P.D. of the P.D.Patel Ayurveda hospital, nadiad, Gujarat. The patients were selected randomly irrespective of their sex, religion, occupation, economical class etc.

### INCLUSION CRITERIA

Patients with clinical features and ultrasonographic evidence of BPH.

### EXCLUSION CRITERIA

Patients with clinical positive history of any serious and/or debilitating disease conditions have not been selected for the present study.

### INVESTIGATIONS

Routine laboratory investigations like Hb, T.C., D.C., E.S.R. blood sugar and urine routine- microscopic were carried out in all the patients to exclude any pathological conditions.

### TREATMENT PROTOCOLS

The patients have been treated with

- (1) Triphala Guggulu 1 gram three times a day with warm water.
- (2) Lodhra Churna 1 gram  
Musta Churna 1 gram  
Arjun Churna 1 gram three times a day with warm water.
- (3) Avagaha Svedana half hour twice a day morning and evening.

The patients have been kept on normal healthy diet based on ayurvedic principles.

**NUMBER OF PATIENTS:** 12 patients of BPH were registered for the study.

**DURATION OF THE TREATMENT:** All the patients were treated for 30 days in O.P.D.

### ASSESSMENT:

1. Symptoms are assessed before and after the treatment on the basis of international prostate symptom score. Table 1.
  1. Deterioration in quality of life has been assessed before and after the treatment on the basis of



international prostate symptom

score. Table 2.

**Table 1** International prostate symptom score

| IPSS                          | Not at all | Less than 1<br>time in 5 | Less than<br>half the time | About half<br>the time | More than<br>half the time | Almost<br>always |
|-------------------------------|------------|--------------------------|----------------------------|------------------------|----------------------------|------------------|
| Straining                     | 0          | 1                        | 2                          | 3                      | 4                          | 5                |
| Weak stream                   | 0          | 1                        | 2                          | 3                      | 4                          | 5                |
| Intermittency                 | 0          | 1                        | 2                          | 3                      | 4                          | 5                |
| Incomplete<br>emptying        | 0          | 1                        | 2                          | 3                      | 4                          | 5                |
| Frequency                     | 0          | 1                        | 2                          | 3                      | 4                          | 5                |
| Urgency                       | 0          | 1                        | 2                          | 3                      | 4                          | 5                |
| Nocturia (times<br>per night) | 0          | 1                        | 2                          | 3                      | 4                          | 5                |

**Total scores:** 0-7 = mild symptoms; 8-19 = moderate symptoms; 20-35 = severe symptoms.

**Table 2** Quality of life scoring based on international prostate symptom score

| Quality of<br>life<br>deterioration | Delighted | Pleased | Satisfied | Mixed | Dissatisfied | Unhappy | Terrible |
|-------------------------------------|-----------|---------|-----------|-------|--------------|---------|----------|
| Urinary<br>symptoms                 | 0         | 1       | 2         | 3     | 4            | 5       | 6        |

Observations have been evaluated statistically.

## RESULTS AND DISCUSSION

**Table-3** Reduction in straining for urination was found by 66% and urine stream was improved by 60.38%. Intermittency was

relieved by 59 % whereas 63.83% improvement was found in emptying of urinary bladder. Frequency of urine, urgency of urine and nocturia were reduced by 60.71%, 67.39% and 65.45% respectively. All these beneficial effects were statistically significant.

**Table 3** Effect of Ayurvedic treatment on symptoms in 12 Patients of BPH

| Symptoms                         | Mean score |      | %     | SD   | SE   | t     | P      |
|----------------------------------|------------|------|-------|------|------|-------|--------|
|                                  | B.T.       | A.T. |       |      |      |       |        |
| Straining                        | 4.17       | 1.41 | 66    | 8.43 | 2.43 | 13.56 | <0.001 |
| Weak stream                      | 4.42       | 1.75 | 60.38 | 8.22 | 2.37 | 13.48 | <0.001 |
| Intermittency                    | 3.67       | 1.5  | 59    | 6.7  | 1.94 | 13.43 | <0.001 |
| Incomplete<br>emptying           | 3.92       | 1.42 | 63.83 | 7.75 | 2.24 | 13.41 | <0.001 |
| Frequency                        | 4.67       | 1.82 | 60.71 | 8.73 | 2.52 | 13.49 | <0.001 |
| Urgency                          | 3.83       | 1.25 | 67.39 | 7.99 | 2.3  | 13.44 | <0.001 |
| Nocturia<br>(times per<br>night) | 4.58       | 1.58 | 65.45 | 9.23 | 2.67 | 13.51 | <0.001 |



**Table-4** Quality of life was improved by significant. 65.38% which was also statistically

**Table 4** Effect of Ayurvedic treatment on quality life in 12 Patients of BPH

| Symptoms                         | Mean score |      | Mean score | SD   | SE   | t     | P      |
|----------------------------------|------------|------|------------|------|------|-------|--------|
|                                  | B.T.       | B.T. |            |      |      |       |        |
| Deterioration in quality of life | 4.33       | 1.5  | 65.38      | 8.73 | 2.52 | 13.49 | <0.001 |

**Table 5** Effects of Ayurvedic treatment on severity of the disease in 12 patients of BPH

| Severity according to Total Score | No. of Patients Before Treatment | No. of Patients \ After Treatment |
|-----------------------------------|----------------------------------|-----------------------------------|
| Mild                              | 00                               | 04                                |
| Moderate                          | 01                               | 07                                |
| Severe                            | 11                               | 01                                |

**Table-5** According to the total score 11 out of 12 patients were in the maximum severity of the disease whereas one patient had moderate severity before treatment. After completion of the treatment only one patient remained having maximum severity whereas 7 patients shifted in to moderate category and 4 patients shifted to mild category of the disease.

In BPH, main pathology involves hypertrophy of glandular and stromal tissues resulting in to the overall increase of the volume of the prostate gland. Also smooth muscles of the prostate are contracted. Both of these changes obstruct the urethra and cause pressure symptoms like hesitancy, poor prolonged flow and sensation of incomplete emptying. According to Ayurvedic BPH is disease of Mutravaha Srotas. Without entering into consideration of its Ayurvedic nomenclature, we have planned the treatment according to body

components involved. Kapha Dosha is responsible for enlarged prostate and Vata principle for contraction of smooth muscles. Drugs having Lekhana (scraping) action reduce the hypertrophy of the tissues. Triphala Guggulu has Lekhana action and thus helpful in reducing hyperplasia of the prostate. It also has Rasayana property that improves quality of prostate tissues where as it reduces Kapha and Vata by its Tridosahara property. Lodhra, Musta and Arjuna are having Kaphaghna and Grahi action. They on one hand reduce kapha, produce shrinkage in the tissue and on the other reduce the frequency of micturition without affecting total urine output. Avagahasveda pacifies Vata and relaxes the smooth muscles of the prostate. All together relieves pressure on urethra and gives relief in the symptoms.



## CONCLUSION

Ayurved treatment protocol including triphala guggulu, combination of lodhra, musta and arjuna equal part and avagaha svedana is effective in reducing signs and symptoms of benign prostatic hyperplasia. No any adverse event of the treatment was reported.



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