ABSTRACT:
Benign Prostatic Hyperplasia (BPH) also called Benign Prostatic Enlargement (BPE) is a non-malignant enlargement of prostate gland, caused by the excessive growth of prostatic nodules. BPH is a major senile disorder of obstructive uropathy, described in Ayurveda classic as one type of Mutraghata (urinary disorders). Twelve types of Mutraghata reflect the symptoms of retention, incomplete voiding, dribbling, hesitancy, incontinence of urine. These basically presented the features related to the lower urinary tract symptoms (LUTS) and Bladder Outflow Obstruction (BOO) and can be correlated with Benign Prostatic Hyperplasia (BPH) in modern prevalence. The overall incidence rate of BPH is 15 per 1000 men per year. The conservative treatments have been mentioned to relieve the obstructive uropathy by reducing prostate size and enhancing the tone of urinary bladder musculature in contemporary medical science. Similarly, in Ayurveda also various researches are going on to find out a suitable treatment option to manage Mutraghata. In present article, the reassessment of Kanchnar Guggulu and Karkatibeejadi churna has been done in the management of Benign Prostatic Hyperplasia. They helped to reduce the size of prostate gland and gave symptomatic relief.

Key words: Kanchnar Guggulu, Karkatibeejadi churna, Benign Prostatic Hyperplasia, Mutraghata

INTRODUCTION: Various references are available in Ayurvedic classics about “Vatashita” which is one of the 12 types of Mutraghata. Mutraghata means mutravrodha when dushita vata gets localized in between basti and guda, produces a dense fixed firm glandular swelling known as Vatashita leading to Vinmutrasanga with adhamana and ruja in Basti pradesha. This condition can be correlated to Benign Prostatic Hyperplasia (BPH) can be managed by conservative and surgical treatment which includes Anti-androgen therapy, Alpha blockers, Aromatase inhibitors, Prostatectomy, Laser therapy, Microwave Treatment. Success rate of surgery is about 90% in case of acute and chronic retention whereas in patients with mild symptoms only benefited with 65% by surgical management. Prostatectomy leads to impotence in 5% of cases, retrograde ejaculation 50%, severe sepsis 5%. As the patients are fairly old, these complications are liable to occur in early post-operative days. Even conservative therapy has disadvantages like administering anti-androgen therapy cause impotence.
Aromatase inhibitors which are widely used have led to certain side effects like lassitude, depression, gynaecomastia. In this situation, it is possible that Ayurveda will be able to provide a treatment that is natural and free from any adverse effects. Acharya Sushruta has mentioned successful treatment of Mutraghata with Kashaya, Kalka, Ghrita, Kshara, etc preparations of different drugs. This research work was carried out with the ultimate aim of finding the best treatment available in Ayurveda for BPH. Considering the drawbacks of the treatments available, there is a need of easy and effective treatment in the management of BPH. Present case study was planned as per management principles to evaluate the clinical efficacy of Kanchnar Guggulu (KG) and Karkatibeejadi churna (KBC) in the management of Mutraghata with reference to BPH.

AIMS AND OBJECTIVES: To evaluate the efficacy of Kanchnar Guggulu (KG) and Karkatibeejadi Churna (KBC) in the management of Benign Prostatic Hyperplasia.

MATERIAL AND METHODS:

- **Source of the data:** Study is carried out in OPD of Shalya Tantra, University College of Ayurved Hospital, Dr. Sarvepalli Radhkrishnan Rajasthan Ayurved University.
- **Type of Study:** Single Case Study

DIAGNOSTIC CRITERIA:

1. **Subjective Parameters:**
   - Diagnosis was based on the clinical signs and symptoms of the disease, which on International Prostate Symptoms Score (I-PSS).

2. **Objective Parameters:**
   - USG
   - PSA
   - Urine (R & M)

*Selection Of Drugs*

All the drugs were collected from nearby regions in the Hemant Ritu. Wet drug was dried in sunlight and then was properly formulated at a local pharmacy. The drugs were collected after proper identification.

*Preparation Of Drugs:*

1) **Kanchnar Guggulu** - All the raw materials except Guggulu were taken in rationale proportion and were crushed in the form of powder. The Guggulu of same quantity was dissolved in water properly. Then the previously formed powder was pulverized in this solution as a doughy mixture. Small pellets like tablets of the weight of 500mg were prepaid and get dried under direct sunlight.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name</th>
<th>Botanical Name</th>
<th>Family Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kanchnar</td>
<td>Bauhinia purpurea</td>
<td>Caesalpinioideae</td>
</tr>
<tr>
<td>2</td>
<td>Haritaki</td>
<td>Terminalia chebula</td>
<td>Combretaceae</td>
</tr>
<tr>
<td>3</td>
<td>Vibhitaki</td>
<td>Terminalia bellerica</td>
<td>Combretaceae</td>
</tr>
<tr>
<td>4</td>
<td>Amalaki</td>
<td>Emblica officinalis</td>
<td>Euphorbiaceae</td>
</tr>
<tr>
<td>5</td>
<td>Pippali</td>
<td>Piper longum</td>
<td>Piperaceae</td>
</tr>
<tr>
<td>6</td>
<td>Maricha</td>
<td>Piper nigrum</td>
<td>Piperaceae</td>
</tr>
<tr>
<td>7</td>
<td>Shunthi</td>
<td>Zingiber officinale</td>
<td>Zingiberaceae</td>
</tr>
<tr>
<td>8</td>
<td>Varuna</td>
<td>Crataeva religiosa</td>
<td>Capparidaceae</td>
</tr>
<tr>
<td>9</td>
<td>Sukshma-ela</td>
<td>Elettaria cardamomum</td>
<td>Zingiberaceae</td>
</tr>
<tr>
<td>10</td>
<td>Dalchini</td>
<td>Cinnamomum zeylanicum</td>
<td>Lauraceae</td>
</tr>
<tr>
<td>11</td>
<td>Tejpatra</td>
<td>Cinnamomum tamala</td>
<td>Lauraceae</td>
</tr>
</tbody>
</table>
12. **Guggulu** | **Commiphora mukul** | **Burseraceae**
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2. **Karkatibeejadi Churna** - All the raw materials – **Karkatibeej, Saindhav lavana** and **Triphala** were taken in equal quantity, dried, crushed into powder form and mixed well.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name</th>
<th>Botanical Name</th>
<th>Family Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Karkati</strong></td>
<td><em>Cucumis sativus</em></td>
<td>Cucurbitaceae</td>
</tr>
<tr>
<td>2.</td>
<td><strong>Saindav Lavana</strong></td>
<td>Rock salt</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td><strong>Vibhitaki</strong></td>
<td><em>Terminalia bellerica</em></td>
<td>Combretaceae</td>
</tr>
<tr>
<td>4.</td>
<td><strong>Amalaki</strong></td>
<td><em>Emblica officinalis</em></td>
<td>Euphorbiaceae</td>
</tr>
<tr>
<td>5.</td>
<td><strong>Haritaki</strong></td>
<td><em>Terminalia chebula</em></td>
<td>Combretaceae</td>
</tr>
</tbody>
</table>

**Case Report**: A male patient of age 50 years working as a lecturer in government school was complaining of –
- Dribbling micturition
- Incomplete emptying of bladder since 6 months
- Nocturia 6-7 times
- Urgency of micturition

No H/O – DM / HTN / Koch’s / Bronchial Asthma
No H/O – Any drug allergy
P / M / H – Nil
P / S / H – Haemorrhoidectomy before 3 years
P / H – Bowel – irregular bowel habit
Bladder – Dribbling micturition and weak stream
Sleep – disturbed by nocturia
Appetite – normal
Addiction – Alcoholic since 15 years
Diet – Spicy and fermented food regularly
O / E – G.C. fair
Temparature – Afebrile
Wt – 80 kg
B.P. – 130 / 90 mm Hg
S / E – RS – Chest B/L clear
CVS – S1, S2 normal
CNS – Conscious and oriented
P / A – soft and non-tender

**INVESTIGATIONS**
- USG Pelvis
- PSA
- Urine (R & M)

Reports suggested and confirmed BPH as prostate wt. was 38 gms and post residual urine volume was 140cc with normal PSA value and urine R&M

**Treatment Plan**: Treatment was planned as follows:
1) **Kanchnar Guggulu** – 500 mg twice daily orally with luke warm water
2) **Karkatibeejadi Churna** – 3 gm twice daily orally

Anupana – koshna jala

**RESULT**: The above treatment was given for the 15 days and advised for a follow up. After 15 days the symptoms were reduced as per I-PSS. The same treatment was continued for 2 months.

The USG Pelvis was done after 2 months. Reports after 2 months had dropped down to 36 gms and post residual urine volume to 80cc, and also all the symptoms of the patients are decreased considerably.

**Pathya-Apathya**
- **Pathya** - Patient is encouraged to have cucumber (*karkati*) in the diet in form of salad.
- **Apathya** - Use of excessive alcohol and spicy food avoided in the diet.

**OBSERVATIONS**:
Patient relieved symptomatically and there was significant decrease in prostate weight and post residual urine volume.
Table: Parameters before and after treatment

<table>
<thead>
<tr>
<th>BEFORE TREATMENT</th>
<th>AFTER TREATMENT</th>
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<tbody>
<tr>
<td>Prostate Weight – 38 gm</td>
<td>Prostate Weight – 36 gm</td>
</tr>
<tr>
<td>Post residual urine volume – 140 cc</td>
<td>Post residual urine volume – 80 cc</td>
</tr>
<tr>
<td>I-PSS Score – 21</td>
<td>I-PSS Score – 13</td>
</tr>
</tbody>
</table>

DISCUSSION: The disease Vatastheela, one of the 12 Mutraghata disorders, can be correlated with BPH on the basis of its sthana (place), which is between Guda and Basti, and also on the basis of the correspondence of the symptoms and signs.

Vishamashana was found in the majority of the patients. Ama is the chief causative factor in the pathogenesis of vatastheela as described by Charaka, and Vishamashana is responsible for Ama formation which leads to making the firm background for disease. Disturbed sleep was found in almost all the patients, which might be due to the increased frequency of micturition at night. Constipation was found in most of the patients, which might be due to faulty dietary habits such as Vishamashana.

In the context of Utpatti of Basti and Guda it has been told that, they are the Prasada Bhaga of Rakta and Kapha. This Prasada Bhaga gets Pachymana by Pitta and in this process Vata helps Pitta to potentiate the action. Mootrashtila occurs in between Basti and Guda region and this phenomenon has influence on the disease manifestation of Mootrashteela also. The epithelial budding and glandular morphogenesis in BPH are similar to those in embryonic tissue, a process generally forbidden in adult organs, leading to the suggestion that BPH is the result of a “reawakening” of the embryonic inductive potential of prostatic stroma in adulthood7. It is very much likely to support the concept that the incidence of Ashthila is promoted by embryonic precursor after vitiation of Kapha and Rakta Dosha. These Dosha get agrgrate in old age and develop Kaphaja Granthi like growth. Rakta also gets involve in pathogenesis, as the aging prostate maintains a high level of dihydrotestosterone (DHT), as well as a high level of androgen receptor; thus, the mechanisms for androgen dependent cell growth are maintained.

As the pathology of BPH, the fact revealed that the prostatic growth factor was found through sequence analysis to be basic Fibroblastic Growth Factor (FGF). In addition to FGF, other heparin-binding growth factors (fibroblastic growth factor), Transforming Growth Factors (TGF-13), and Epidermal Growth Factor (EGF) have been found in hyperplastic BPH tissue. It is likely that growth factors play some role in the pathogenesis of BPH. It is quite possible that Kanchnar Guggulu may work to overcome the fibroblastic growth factor (FGF) or some other.

Most of the drugs present in Kanchnar Guggulu have Katu Rasa, Ruksha and Laghu Guna, Ushna Virya, Madhura Vipaka and the property of Kapha-Vata Hara. Major proportion of Madhura, Tikta and Kashaya Rasa containing drug is also present. The properties like Rasayana, Vayasthapana, Medhohara, Krimighna, Lekhana, Shruthaghna and Vata-Kapha Shaamana are helpful to act on various changes in BPH. The tremendous action may be due to anti-androgenic, anti-inflammatory, antibiotic, anti-mutagenic
By use of Karkatibeejadi churna, highly significant relief was found in frequency of micturition, hesistancy, and dysuria, while significantly result was observed in the symptoms of urgency and nocturia. Karkatibeejadi Churna contains properties like Tridoshaghna, Mutral, Anulomana, Mutraawarodhahara and it is by the virtue of these gunas that it causes decrease in prostate size and increase in urine flow rate. Another probable reason for such relief may be the effect of the Triphala by resolving the hormonal imbalance. As mentioned by the Acharyas, Karkatibeejadi Churna helps to reduce the size of prostate gland and give symptomatic relief.

CONCLUSION:
The excellent action of Kanchnar Guggulu and Karkatibeejadi Churna might have been due to their synergistic effect both on hormonal and physiological level due to their anti-androgenic, anti-inflammatory, anti-biotic, anti-mutagenic, anti-spasmodic, anti-fibroblastic and other growth factors. The mode of action of these formulations is also over the psychological component of the patients. The stress relieving elements, for both on brain and urinary sphincters are present to rationalize the action. The phyto-estrogens present in these formulations may play a role in reducing and inhibiting the prostate size.

The ayurveda drug should be selected depending upon the symptoms and the cause of the disease. With the help of ayurveda treatment one can easily manage the symptoms of the BPH.

REFERENCES:

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