

# Efficacy of Kupilu Beeja Churna in Management of Bastikundal w.s.r to Urinary incontinence in Geriatrics

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Subject:- Ayurveda (Clinical Research Paper)

**ABSTRACT:** Urinary Incontinence is also known as involuntary urination, it means uncontrolled leakage of urine. It is common and distressing problem in India, which may have a large impact on quality of life. It is twice as common in women as in men. It has been identified as an important issue in geriatric health care. Urinary incontinence is often result of an underlying medical condition but is under reported to medical practitioners. Kupilu Beeja Churna shows improvement in Lakshnas. No any adverse and toxic effect of the drug was observed during the clinical study. Kupilu Beeja Churna is effective in the management of Bastikundal with special reference to Urinary Incontinence.

**Key words:** Bastikundal, Kupilu Beeja,

**INTRODUCTION:** Bastikundal is common and troublesome (particular in elderly) and then is a considerable reduction in quality of life of patients with this condition. The loss of bladder control, is common and often embarrassing problem now a days. Urinary Incontinence is also known as Involuntary urination, it means uncontrolled leakage of urine. It is common and distressing problem in India, which may have a large impact on quality of life. It is twice as common in women as in men. It has been identified as an important issue in geriatric health care. Urinary incontinence is often result of an underlying medical condition but is under reported to medical practitioners.

**REVIEW OF LITERATURE :** Bastikundal is mentioned by sushruta. At around 400 A.D Madhavakar describes bastikundal vyadhi separately in Madhavnidan. BASTIKUNDAL also mentioned by Bhavprakash , Bhaishjyarnavali and Sharangdhar samhita ,Yogratnakar etc. Symptoms of bastikundal can be correlated with urinary incontinence of modern medicine upto some extends.

**HYPOTHESIS:-** H<sub>0</sub> –Kupilu beeja churna is not effective in the management of bastikundal.

H<sub>1</sub> –Kupilu beeja churna is effective in the management of bastikundal

## AIM AND OBJECTIVES

**Aim:-** To study the effect of Kupilu Beeja churna in the Management of Bastikundal w.s.r to Urinary incontinence.

**Objectives :-**

1. To study literary review of Bastikundal w.s.r to Urinary incontinence
2. Literary review of Kupilu Beeja churna in the management of Bastikundal w.s r to Urinary incontinence.

**MATERIALS AND METHODS****Materials:- Kupilu Beeja churna:-**

DRUG	BOTANICAL NAME	ENGLISH NAME	PART USE	QUANTITY
Kupilu	Strychnus Nux-vomica Linn.	Loganiaceae	seed	125mg

**PREPARATION OF DRUG:-**

- **Purification Of Kupilu Beeja:-** 1) Kupilu beeja are soaked in cows urine for 7 days.2)Then outer covering is removed and the seeds are cooked with cows milk.3) Then they are fried in cows ghee.
- **Preparation of Churna:-** 1)Raw materials was purchased from authenticated sources. 2) Kupilu Churna was prepared according to Samhitas.3) Kupilu Churna was passed through sieve no. 85 5)The churna was collected be prepared simultaneously and then churna was kept in air tight container and labeled accordingly.

1. **Drug Authentication :-**Authentication and Standardization of Kupilu Churna were done at Rasashastra Bhaishajya Kalpana Dept. B.V.D.U. College Of Ayurved, Pune-43 .

**Method:- Type of study:-**Open clinical trial.

- **Clinical Study :**

- **Sample Size** - Total: 20 Patients (1.66% of prevalence, N =25.08)  
Sample size is calculated using formula.
- **Study site** - Clinical trials conducted at OPD / IPD of B.V.D.U. Ayurved Hospital, Pune.
- **Study type** - Open clinical trials.

**Place of study:-**Bharati Vidyapeeth (Deemed To Be) University, Ayurved Hospital, Pune.

- **Work Plan:-**

Particulars	Group A
<b>No. of Patients</b>	20
<b>Medicine</b>	Kupilu Beeja Churna
<b>Anupan</b>	godugdha
<b>Dose</b>	60mg
<b>Time</b>	Vyanodana (after meal)
<b>Route Of Administration</b>	Oral
<b>Duration</b>	21 Days

- **Follow Up: -** Treatment will be given for 21 Days duration and follow up will be taken on every 7th day from the commencement of treatment.

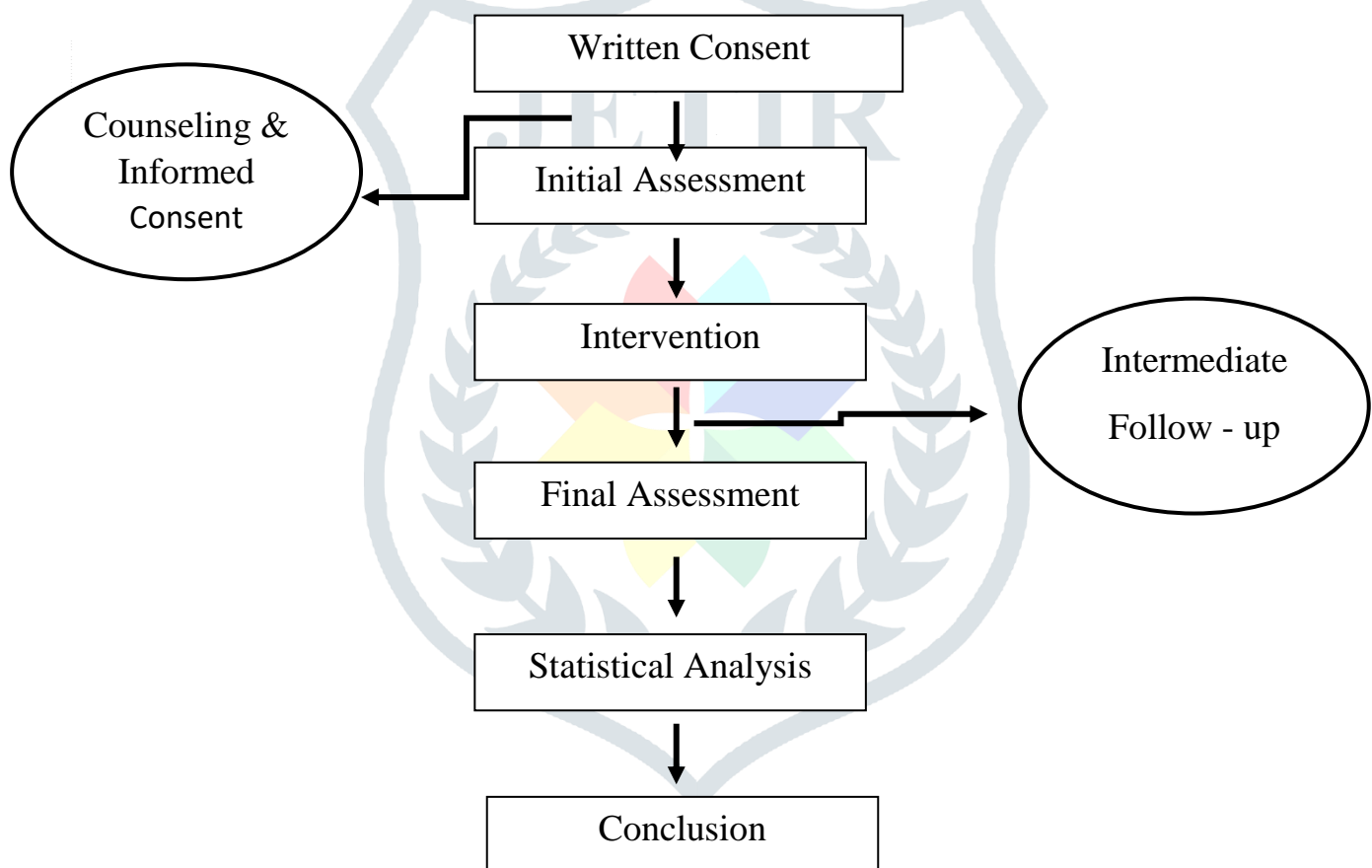
**INCULSION CRITERIA:-** 1) **Gender** - Either 2) **Age** -above 60 years 3)Patient having clinical signs and symptoms of Bastikundal as described in ayurvedic texts.4)Patient who having Bastikundal (Overflow incontinence)

**EXCULSION CRITERIA :-** Bastikundal along with other chronic diseases or complications.

- 1) CA Prostate,2) Chronic Alcoholic Patients, 3)Drug induced Bastikundal,4) Patients suffering from mutrashamari(renal calculus),5) Patients suffering from vata-ashthila (Benign prostate hyperplasia),
- 6) Patients on any ayurvedic drugs during the last 15 days for same reason,7) Spinal cord injury patients,
- 8) Neurogenic bladder,7) Tuberculosis and 8) Immuno Compromised Diseases

- **WITHDRAWL CRITERIA:-** The patient were withdrawn from the trial if:
  - The patient is not willing to continue the trial to follow the assessment schedule.
  - If occurrence of serious adverse events.
  - The investigator feels that the protocol has been violated OR patient has become in co-operative.

- **TRIAL DESIGN:- SCREENING OF SUBJECTS FOR INCLUSION**



**PARAMETERS OF ASSESSMENT :-**Relevance of sign and symptoms as per described in Ayurvedic Symptomatology. :- 1) Shula (pain during micturation) 2) Spandana (vibration) 3) Daha (burning micturation) 4) Mutravivarnata(Discoloration of urine) 5) Sharirgourava (heaviness in body) 6) Shotha (abdominal fullness) 7) Bindu bindu mutrapravriti(Dribbling micturation)

- **EFFICACY SCORE SYSTEM:- Severity Index:-** Subjective parameters – severity of symptoms were assessed by grading Absence of symptoms – 0, Mild degree of symptoms- 1 Grade, Moderate degree of symptoms- 2 Grade, Severe degree of symptoms -3 Grade
- **PRIMARY END POINT:-** Improvement in the signs and symptoms of Bastikundal in the patients.
- **SECONDARY END POINT :-** effect of Kupilu beeja churna in management of Bastikundal.

- OBSERVATION AND RESULT
- AGE WISE DISTRIBUTION

AGE	No of pts	%
60-65	7	35
65-70	5	25
70-75	2	10
75-80	4	20
above 80	2	10
<b>Total</b>	<b>20</b>	<b>100</b>

#### GENDER WISE DISTRIBUTION:-

Gender	No of pts	%
Female	08	40.00
Male	12	60.00
<b>Total</b>	<b>20</b>	<b>100.00</b>

#### EFFECT OF KUPILU BEEJA CHURNA IN SUBJECTIVE CRITERIA OF BASTI KUNDAL

Parameter	Mean		x	% of Improvement	Negative rank	Positive rank	tie	W	P
	BT	AT							
SAHASHLOOLA MUTRAPRUVRITTI	2.2	0.75	1.45	65.91%	15	0	5	-3.453	0.001
SPANDAN	1.1	0.1	1.00	90.91%	14	0	6	-3.407	0.001
SAHADAHA MUTRAPRUVRITTI	2.1	0.6	1.50	71.43%	15	0	5	-3.571	0
MUTRAVIVARNATA	2.2	0.65	1.55	70.45%	16	0	4	-3.528	0

SHARIR GAURAV	1.9	0.4	1.50	78.95%	17	0	3	-3.703	0
BINDU MUTRAPRUVRITTI	3.3	1.05	2.25	68.18%	18	0	2	-3.85	0
SAHAKASHTA MUTRAPRAVRITTI	2.55	0.5	2.05	80.39%	18	0	2	- 3.84	0
AADHMAN	1.7	0.15	1.55	91.18%	17	0	3	-3.681	0

### OVERALL EFFECT OF KUPILU BEEJA CHURNA IN BASTI KUNDAL

Overall effect of Kupilu Beeja Churna in Basti Kundal	Number of Patients	Percentage
Complete Cure	<u>00</u>	<u>00.00 %</u>
Marked Improvement	<u>13</u>	<u>65.00%</u>
Improvement	<u>05</u>	<u>25.00%</u>
Stable	<u>02</u>	<u>10.00%</u>
Detoriation	<u>00</u>	<u>00.00%</u>

## DISCUSSION

### EPIDEMIOLOGICAL DISCUSSION:-

1. **Age :-**Most of the people belong to the age group 60-70 yrs (60%) which is Vatpradhan predominant Kala hence Bastikundal Vyadhi is seen in this age group.

2. **Gender :-**Out of 20 patients Males 12 (60%), Females 08 (40%). Over exertion, stress factor is generally found in males which leads to Vataprakop causing Bastikundal. Hence we got more male patients

### DISCUSSION ON THE BASIS OF SUBJECTIVE CRITERIA:-

- 1) **Sahashoola Mutrapravritti:-** According to Wilcoxon's sign rank test Kupilu in Sahashoola Mutrapravritti. The lakshana was reduced probably due to Laghu properties of Kupilu Beeja Churna. Kupilu was good for Pain and Inflammation leads to presence of certain constituents which inhibit the activity of mediator responsible for causing pain, Kupilu seeds also have Anti Inflammatory activity which decreases inflammation and pain
- 2) **Spandan :-** According to Wilcoxon's sign rank test Kupilu beeja in Spanadan. The Spandan Lakshana is reduced due to Laghu, Katu properties of Kupilu Beeja Churna. Kupilu was good for urinary problems like Burning sensation and Dribbling micturation. For frequent & insufficient urination it act as a tonic that helps to manage the symptoms like Spandan.
- 3) **Sahadaha Mutrapravritti:** The symptom decreased due to Madhura Rasa, Sheeta Veerya, snighdha properties of Godugdha. Absorption was more because of Godugdha, Kupilu may increase Vata Dosh due

to its Snigdha Guna there is Vata Shaman. Kupilu is having Anti Inflammatory and Analgesic action hence it was beneficial for Sahadah Mutra-pravrutti

- 4) **Sharirgaurav:-** symptom was reduced as Kupilu Beeja Churna has Laghu and Ruksha Gunas, Katu Vipak and Tridoshghna properties. Kupilu increase muscle tone, improving nerve stimulation, increase the blood vessels which reduce laziness and fatigue.
- 5) **Bindu Bindu Mutrapravritti:-** symptom was reduced due Ushna Veerya, Deepan Pachan properties of Kupilu Beeja Churna
- 6) **Sahakashta Mutrapravritti:-** symptom was decreased due to Laghu, Ruksha gunas of Kupilu Beeja Churna and mainly Madhura Vipak of Godugdha which reduces the kashtata which ultimately reduces the Bastishula and Bastishoth
- 7) **Adhman:** symptoms reduced due to Katu Tikta Rasa, Katu Vipak and tridoshahara properties of Kupilu Beeja Churna. Kupilu plays role in increasing intestinal motility there by stimulating Gastro-Intestinal activity. Due to there Deepan Pachan properties appetite gets increases and relieving of Aadhman happens

**OVERALL EFFECT OF DRUG :-** 65% of patients show marked improvement, where as 25% of patients show improvement 10% of patients have stable in effects. There was no any complete cure observed in this study. Where as there were no any detoriation in patient was observed.

**MODE OF ACTION :-** Kupilu has been attributed different pharmacological properties. Its seeds possess Tikta, Katu and Kashaya Rasa; Laghu, Ruksha, Teekshna Guna; Ushna Virya and Katu Vipaka. According to some authors, its unripe fruits are Sheeta Virya and the ripe fruits having Guru and Vishada Guna with Madhura Vipaka. Because of all these gunakarmas Bastishaithilya gets reduced and ultimately it reduces symptoms like Shotha, Sahadaha, Bindi Bindu Mutrapravritti. Thus Mutravaha Srotas Dushti is corrected.

#### **SUMMARY & CONCLUSION:-**

1. Kupilu Beeja Churna shows improvement in Lakshnas like Sahashula Mutrapravritti, Spandana, Sahadaha Mutrapravritti, Bindu-Bindu Mutrapravriti and Sahakashta Mutrapravritti.
- 2) No any adverse and toxic effect of the drug was observed during the clinical study.
- 3) Kupilu Beeja Churna is effective in the management of Bastikundal with special reference to Urinary Incontinence.

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