

**EFFICACY OF ANANDA YOGA CHURNA IN THE MANAGEMENT OF MOOTRASHMARI (UROLITHIASIS) -
A CLINICAL STUDY****Tiwari Yati^{1*}, Prasad Kamleshwar², Singh Madhu³**¹Lecturer, dept. of Shalya Tantra, J.D. Ayurvedic Medical College & Hospital, GT Road, Bhankari, Aligarh.²Reader, Dept. of Rog & Vikriti Vigyan J.D. Ayurvedic Medical College & Hospital, GT Road, Bhankari, Aligarh.³Ex. Assistant Professor, Dept. of Pharmacy, Aligarh College of pharmacy, Aligarh, U.P. India.**ABSTRACT**

According to modern science, the formation of stone in urinary system is one of the main problems of urology. The cause and mechanism of their formation is still uncertain. On one hand surprisingly stone does not always form when such factors are present and on the other hand stones may develop when factors are apparently absent too. Treatment of calculi in modern science is only surgery and very less medicines are available for this purpose. After surgery, the probability of reoccurrence of calculi is same as previously, so it is negative aspect of this science. But in ancient medical, after treatment and removal of stone, the chances of recurrence are rarely occurs. In this research work, subjective symptoms like pain, burning micturition, haematuria, dysurea, tenderness and fever are reduced very significantly and their recurrence does not occurs during trial of drug. Maximum patients belong to the category of renal and ureter calculi and efficacy of drug are also maximum observe on renal and as well as ureter. On the basis of size of calculi i.e. 6 mm to >10 mm, the efficacy of drug are also observed and result exhibited as 66 percent to 100 percent. So, the overall result in this research work is that, 72 % patients are cured, 20% patients are improved and only 8% patients are unchanged. Hence, the classical medicine *Anand yoga churna* for *Mutrashmari* is best the medicine because its efficacy is very significant on both subjective and objective parameters, cast effective, easy availability and also removed the negative aspect of modern medical science i.e. recurrence of calculi.

KEYWORDS: *Mootrashmari, Urolithiasis, Anand Yoga Churna, Vatic, Paitik and Shlishmika.***INTRODUCTION**

Thousands of years ago, scientist of ancients medical identified the disease urolithiasis and named it as *Ashmari* has been derived from the "Ashman" Sanskrit word which literally means a structure resembling stone. Thus in this disease, there is development of a calculus, a foreign body in the urinary system including Kidney, ureter and bladder. However, urinary calculogenesis is not a simple process. Many theories have been put forth in relation to urinary stone formation like supersaturated solution, hyperparathyroidism and retinol deficiency in contemporary science¹. But, the pathogenesis of urolithiasis is described in ancient science is resemble with the supersaturated solution theory of modern medical science. Because, when dries up of urine (super saturation of urine) by *Vayu*, the *Asmari* (calculus) arise gradually in urinary system and gall bladder like *GoroChan* in cow². But another theory in *Ayurveda* narrated that in those who do not observe proper cleansing procedures and in those who are indiscrete regarding their dietary habits, the *Sleshma* gets aggravated and mixed with urine enters the urinary bladder and there in it produce calculi³.

Classification and kind of urinary calculi is based on its chemical constitution and their morphology, so four types of urinary calculi are described in contemporary science i.e. calcium calculus, uric acid calculus, cystine calculus and mixed calculus⁴. Similarly, in Ayurvedic text, same types of calculi are described i.e. *Vatika, Paitika, Shlaishmika* and *Shukraja*⁵. They may be correlated with

calculi of modern medical science on the behalf of morphology of calculus and clinical presentation during aggravation of disease. The *Vatika, Paitika and Shlaishmika ashmari* may be similar to calcium oxalate, uric acid and urate, and phosphate calculi respectively. The drug *Anand yoga churna* is classical medicine and described in Ayurvedic text *Bhaishajyaratnawali* and indicated for *Mootrashmari*.⁶

MATERIALS AND METHODS**Selection of patients**

On the basis of inclusion and exclusion criteria On the basis of inclusion criteria, 32 patients of Urolithiasis were registered from O.P.D. & I.P.D. of Shri J.G.C.H. society's and Ayurvedic medical college hospital, Ghataprabha, who were clinically found appropriate for clinical study.

Inclusion criteria

- All patients with clinical manifestation Patients presenting with symptoms and signs of *Mootrashmari* (Urolithiasis), confirmed radiologically.
- Age between 20 to 50 years.
- Patients of either sex will be selected.
- Patients with renal calculi of more than 6.0mm will be a part of the study.

Exclusion criteria

- Age below 20 and above 50 years
- Stag horn Renal stone

- Hydronephrosis
- Pyelonephritis
- Diabetes mellitus
- Malignancy
- Chronic renal failure
- Severe UTI or any other infection
- Calculus associated with complications.
- Those of more than 8mm embedded in the ureter are excluded
- Any other systemic disease like hyperparathyroidism, Gout etc, which requires systemic treatment and influence the outcome of the treatment.

Discontinuous criteria

- A non cooperative patient.
- Whose symptoms were aggravated?
- Who developed hypersensitivity for any constituents of trial medicine?

Assessment criteria

Assessment of the effect of therapy was done on the following parameters.

Subjective parameters

Assessment for any improvement in various clinical features of urolithiasis was done once in a week for 1 month followed by once in 15 days for next 2 months or till the stone is expelled whichever is earlier on the basis of grade scoring methods.

Symptoms rating score of urolithiasis

S. No.	Severity of symptoms	Score	Scoring symbol
1.	Absent	0	-
2.	Mild	1	+
3.	Moderate	2	++
4.	Severe	3	+++

Objective parameters

- Plain X-ray abdomen
- USG of abdomen and pelvis
- IVP in cases where the stone could not be picked up in USG but clinically evident
- Routine examination of urine

Drug delivery and duration

Ingredients of drug

1. *Apamarga (Acharanthus aspera linn.)*
2. *Palasha (Butea monosperma)*
3. *Tila Panchanga (Sesamum indicum)*
4. *Kadali (Musa paradisiaca)*
5. *Amalaki (Emblica officinalis gaertn.)*

Bhavana dravya- Ajja mutra

Out of total 25 registered patients only 20 patients were completed their trial. Study was carried out under single group.

- *The Ananda yoga churna* was constituted according to *Churna* preparation method in *Rasa-Shastra* pharmacy of Shri j.G.C.H. society's and *Ayurvedic* medical college hospital, Ghataprabha.
- **Dose:** *Anand Yoga Churna*, 250 mg morning and evening.

➤ **Anupana:** Luke warm water

➤ **Course:** 3 Months

➤ **Route of drug:** Oral

➤ **Follow up:** Patients had followed up once in a week for 1 month and followed by once in 15 days for next 2 months or till the stone is expelled whichever is earlier.

Data documentation and statistical analysis

It was a clinical study under single blind test and its all data were analyzed using appropriate statistical tests. All values of quantitative variables are expressed as percentage.

RESULT AND DISCUSSION

Table 1: Showing the efficacy of drug on subjective parameters

Symptom	No. of Pts	Day 7	Day 15	Day 30	Day 60	Day 90	Efficacy in percentge (%)
Pain	18	8	2	6	2	2	88.88
Burning micturition	15	7	7	1	0	0	100
Haematuria	06	3	3	0	0	0	100
Dysuria	05	2	1	2	0	0	100
Nausea	06	5	1	0	0	0	100
Tenderness	04	1	1	1	1	1	75
Fever	08	8	0	0	0	0	100

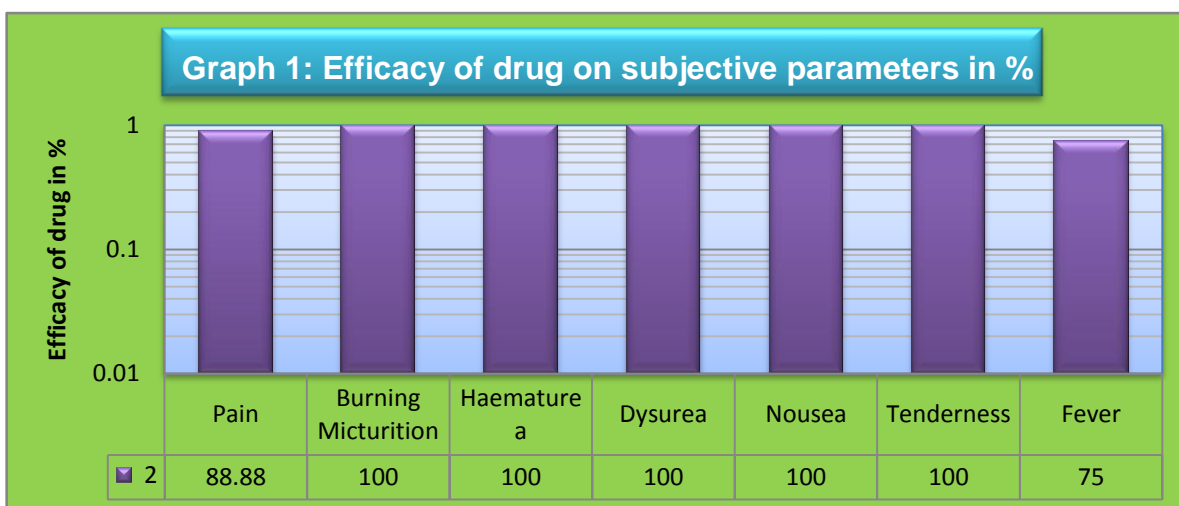


Table 1 and Graph 1 are showing the excellent relief in all the symptoms in all the patients. 88.88%, 100%, 100%, 100%, 100%, 100%, and 75% relief was observed in pain, burning micturition, haematuria, dysuria, nausea, tenderness and fever respectively.

Table 2: Showing the efficacy of drug according to site of calculus

Presence of Calculus			
Site of the Calculus	Before Treatment	After treatment	% of efficacy
Renal	17	07	58%
Ureter	8	00	100%
Total	25	07	72%

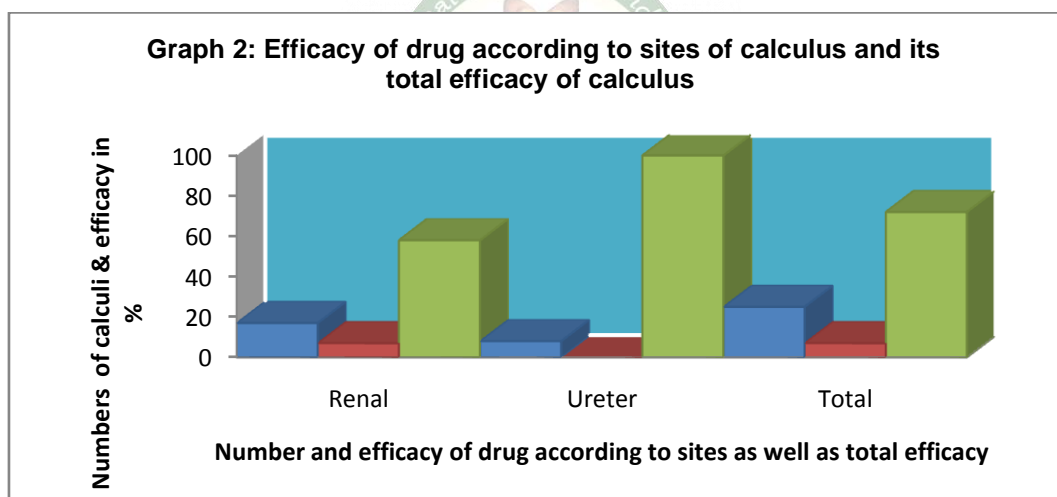


Table 2 and Graph 2 are showing the result and efficacy of drug according to site of calculus it was observed that 17 stones had renal and 8 had ureteric calculus. After the treatment 10 (58%) are expelled from renal and all 8 (100%) were expelled from ureter. As a hole out of 25 stones only 7 stone were found.

Table 3: Showing the efficacy of drug according to the size of calculi

Size of calculi	No. of Calculi	Expelled	Reduction in the size	No change	Efficacy in %
6 mm	8	8	-	-	100
7 mm	8	8	-	-	100
8 mm	5	2	3	-	100
9 mm	3	-	2	1	66.66
> 10 mm	1	-	-	1	00
Total	25	18	5	2	

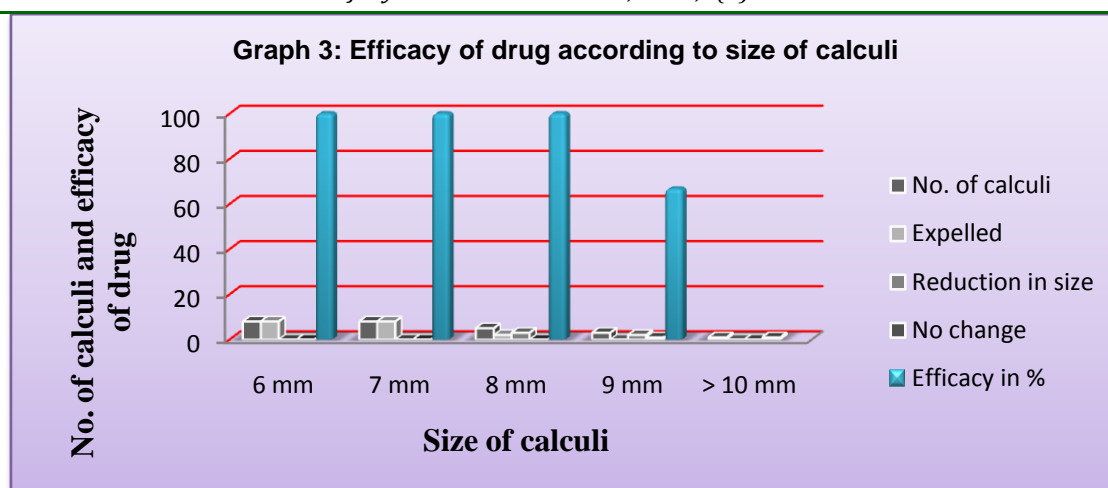


Table 3 and Graph 3 are showing the result and efficacy of drug according to size of calculus. It was found that lower the size of stone have higher efficacy and vice versa.

Table 4: Showing the overall efficacy of drug

Effect of therapy	No. of Calculi (Total =25)	Efficacy in percentage (%)
Cured	18	72%
Improved	5	20%
Unchanged	2	8%

Before the treatment it was observed that 12 patients had renal and 03 had ureteric calculus and 05 patients had both. After the treatment 13 (65%) patients are free from renal calculus and 02 (66%) were free from ureteric calculus. As a whole out of 20 patients 14 patients (46.66%) were free from calculi. In multiple calculi out of 06 patients 2 patients got free from calculi and in 3 patients smaller stone expelled out and larger one are found to reduce in their sizes, and in one patient one stone is expelled out and another stone become enlarged in its size.

CONCLUSION

Anand yoga churna with lukewarm water was extremely significantly effective in improving the symptoms of pain, haematuria, dysuria, fever, burning micturition, nausea and highly improvement in radiological finding like size of calculus. The therapy was well tolerated by all patients and no unwanted effect was reported during the trial period. Hence the drug trial is safe, easy available and cost effective and can be recommended to the patients of *Mootrashmari*.

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