



Case Study

A CASE STUDY ON *MUTRASHMARI* (RENAL CALCULI) WITH *BRUKKASULANTAKA VATI*

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ABSTRACT

Aim: To evaluate the clinical effect of *Brukkasulanta vati* in the management of Renal calculi (*Mutrashmari*). **Background:** Renal calculi (*Mutrashmari*) is a most common disease of urinary system, affecting 10-12% of the population in industrialized countries which is caused by a complex process of several physicochemical events including super saturation, nucleation, growth, aggregation and retention with the kidney. A renal calculi cause symptoms severe pain in the renal angle, pain that radiates to the lower abdomen, pain on urination, cloudy or foul smelling urine, urinating more often than usual etc. which resembles with similar symptoms like *Vastivedana*, *Mutrakrichhrata*, *Sarudhiramutrata*, *Atiavilamutrata*. **Results and Discussion:** *Brukkasulanta Vati* was selected from *Rasatantrasara & Siddhaprayoga Samgraha*. The drug has the property of *Dipana*, *Pachanaanulomana*, *Sulahara*, *Mutraranjana*, *Bhedana*, *Lekhana* and *Sothahara*. The disease possess *Tridosaja* mainly *Kaphavatajasamprapti*, and the drug has the property of *Vatakaphahara*, which breaks down the *Samprapti* of *Mutrashmari*. **Conclusion:** *Brukkasulantaka vati* markedly reducing pain, dysuria, increased frequency of micturation reduction of size and expulsion of calculus.

KEYWORDS: *Mutrashmari*, *Vastivedana*, *Bhedana*, *Sothahara*, *Lekhana*.

INTRODUCTION

Renal calculi are the most common disorder of urinary tract, the other being frequently occurring urinary tract infection. It affects 10-12% of the population in industrialized countries. The incidence of renal calculi has been increasing over the last years with a prevalence of >10%. Epidemiological studies revealed that it is more common in men (12%) than women (6%) and is more prevalent between the ages of 20 to 40 in both sexes. Calcium oxalate is the predominant component of most stones accounting for more than 80% of stones. The remaining 20% are composed of struvite, cystine, uric acid and other stones. *Mutrashmari* [1] is a most painful & common disease of the urinary system. It is the most common and distressing maladies among the group of urinary disorders. *Acharyasushruta*, the pioneer in the art and science of surgery has described widely about described *Nidana* [2], *Purvarupa*, *rupa* [3], *Samprapti* [4] and types [5] about the *Mutrashmari* which is one among the *Mahagada* [6]. There are several *Ghrita*, *Kshara*, *Kashaya Ksheera* and *Vati* preparations has been described by *Acharyas*. Looking into the gravity of the problem it has been decided to work on *Brukkasulantaka vati* [7].

AIMS & OBJECTIVES

To evaluate the clinical effect of *Brukkasulantakavati* in the management of *Mutrashmari* (renal calculi).

MATERIAL AND METHODS

A 40 yrs old Hindu male was suffering from *Mutrashmari* (renal calculi) was selected from OPD of Gopabandhu Ayurveda Mahavidyalaya, Puri, Odisha having OPD No.8137/812/01-03-2018. The patient was presented with complains of pain in flank associated with difficulty in urination and increased frequency of urination since last 15 days. Patient was suffering from mild pain in flank region since last one month. One day suddenly he noticed severe pain in the abdomen associated with nausea. He consulted to a physician and got temporary symptomatic relief. But within few days he noticed that pain is getting severe along with nausea and dysurea for which he approached our hospital.

As per the patient, the pain was severe, intermittent in nature, radiating up to the thigh and was appreciated in both side gradually. Dysuria was felt by the patient in the beginning of urination.

There was no history of Diabetes mellitus, hypertension or any other systemic ailment. But due to stressful schedules, there was qualitative and quantitative irregularity in diet and water intake.

Vital were found normal. On examining the abdomen, no signs of any abnormality were found. As advised, patient went for Ultrasonography of Abdomeno- pelvic region and the report found presence of multiple calculus of 4-5mm sized at both kidneys. His blood and urine analysis reports were within normal limits which was shown in Table No 6.

As per Ayurvedic classics Clinical feature of *Mutrashmari*, *Vastivedana*, *Mutrakrichhrata*, *Sarudhiramutrata*, *Atiavilamutrata*.

Brukkasulantavati was administrated with a period of 1 month. *Brukkasulantakavati* is described in *Rasatantrasara & Siddhaprayoga Samgraha (Ashmari Rogadhikara)*. *Brukkasulantakavati* contain: 1.Vid *Lavana* 2.*Sarjikshyara* 3.*Nabasadara* 4.*Yabakshyara* 5.*Sodhita Tankana*, 6.*Hingu*, 7.*Akarakara* 8.*Piperment*. Dose: 2 tab of 500mg twice daily with water, after food. Patient was also advised to follow strict *Pathyaaahara*, *vihara* during the treatment.

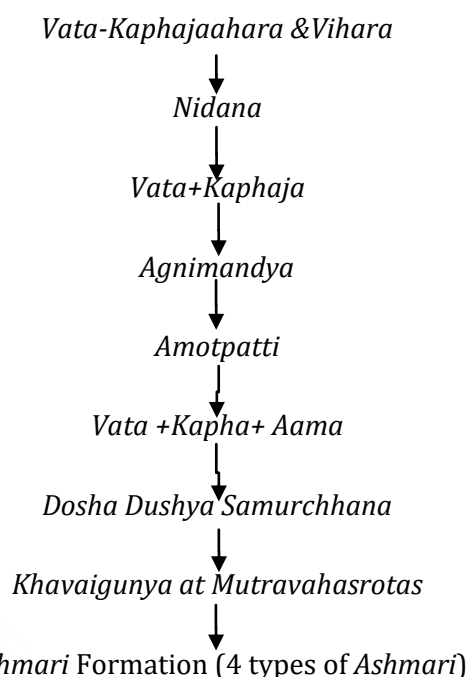
During his follow-up after 15 days he was relieved all the sign and symptoms. He was advised to repeat the USG after 1 month. USG report shows that there was normal abdomen and pelvis. He was instructed to take *Pathyaaaharavihara* for atleast 3 months.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient (s) has/have given his/her/their consent for his/ her/their images and other clinical information

to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Samprapti



Sampraptighataka of Mutrashmari

Nidana : *Kapha, Vata Prakopaka*
Dosha : *Kapha Pradhana Tridosha*
Dushya : *Mutra*
Srotas : *Mutravaha*
Srotodushti : *Sanga*
Agni : *Jatharagnimandya*
Ama : *Jatharagni*
DoshaMarga : *Kostha, Shakha*

Table 1: Personal History

<i>Ahara</i>	<i>Mix</i>	<i>Dosa</i>	<i>Vata-Kapha</i>
Diatery Habit	<i>Vishamasana</i>	<i>Dusya</i>	<i>Mutra</i>
Water Intake	2 ltrs	<i>Srotas</i>	<i>Sanga</i>
Nature of Work	Heavy	<i>Srotadusti</i>	<i>Bisamagni</i>
<i>Vegabidharana</i>	<i>Mutra</i>	<i>Agni</i>	<i>Vishama</i>
Emotional Status	Normal	<i>Kostha</i>	<i>Madhyama</i>
Bowel	Normal	<i>Vyadhi Avastha</i>	<i>New</i>
Appetite	Good	<i>Vyadhi Bala</i>	<i>Madhyama</i>

Table 2: General Examination

Pulse Rate	76/min
Respiratory Rate	18/min
Heart Rate	76/min
Blood Pressure	110/98mm/Hg
Temperature	Normal
Pallor	NAD
Jaundice	NAD

Table 3: Pathological Investigation

	Before Treatment	After Treatment
Date	12/03/2018	14/04/2018
USG	B/L Multiple Renal Calculi (4-5mm)	Normal Abdomen & Pelvis
DC		
N%	73	74
L%	25	26
E%	02	00
M%	00	00
B%	00	00
TLC	11000	11000
Hb %	11.8	12.1
FBS	86	88
PPBS	92	94
Blood Urea	22	20
Serum Creatinine	0.7	0.8
Serum Uric Acid	3.8	3.6
Billirubin Direct	0.1	0.1
Billirubin Total	0.2	0.2
SGOT	24	22
SGPT	26	24
Alkaline phosphate	16	18
Urine reaction	Acidic	Acidic

Table 4: Assessment Criteria

Symptoms	Gradation			
	0	1	2	3
<i>Vastivedana</i> (Pain in flank)	No pain	Bearable pain, medicines not require	Bearable pain and require oral medication	Unbearable pain
<i>Mutrakrichhrata</i> (Dysuria)	No dysuria	Occasional dysuria	Regularly medicine not require	Regular dysuria, require medication
<i>Sarudhira Mutrata</i> (Hematuria)	No haematuria	Smoky colour urine	Black shine	Bright red colour
<i>Atiavila Mutrata</i> (Turbid Urine)	Crystal clear fluid	Faintly cloudy or smoke (turbidity barely visible)	Turbidity clearly present but newspaper easily read through test tube	Newspaper not easily read through test tube
Increased Frequency of Micturation	Up to 6 times	7-9 times	10-12 times	>12 times
Objective Symptoms				
Size of Stone	No change	<5mm	5-10 mm	>10 mm
No of stone	No change	1 stone	2 stones	≥ 3 stones

Table 5: Assessment**A) Subjective Symptoms**

Symptoms	B.T.	AT 1	AT 2
<i>Vastivedana</i> (Pain in flank)	2	0	0
<i>Mutrakrichhrata</i> (Dysuria)	2	1	0
<i>Sarudhira Mutrata</i> (Hematuria)	Nil	Nil	Nil
<i>Atiavila Mutrata</i> (Turbid Urine)	1	1	0
Increased Frequency of Micturation	1	0	0

Table 6: B) Objective Symptoms

Symptoms	B.T.	AT 1
Size of Stone	1	0
No of stone	3	0

DISCUSSION

Brukkasulantaka Vati contain *Akarakara*, *Hingu*, *pipperment*, *Yavakshara*, *Sarjikhshra*, *Tankana*, *Nabasadara*, *Bid lavana* are main constituent. All the ingredients of *Brukkasulantakavati* having the action like *Dipana*, *Pachana Anulomana*, *Sulahara*, *Mutranjana*, *Bhedana*, *Lekhana* and *Sothahara*.

Mainly *kaphadosha* of *Ashmari* is pacify by the *Rukhya*, *Tikshnaguna* and *Katu Rasa* of the drug. *Katu Rasa* and *Ushna Guna* of the drug increase the *Agni* which leads to *Amapachana*. *Rukshyaguna*, *Ushna Virya* and *Kshyariya Rasa* of the drug posses *lekhana* property and mainly the drug *Yavakshara*, *Sarjikhshara* & *Tamkana* with its *Lekhana* property reduces the size and no of stone. *Tikshnaguna*, *Katu Rasa* of the drug helps in *Srotasodhana*. *Snigdha*, *Tikshnaguna* of *Hingu* and *Saraka* property of *Navasadara* helps in *Anulomana* of *Vaigunya vata*. *Vatanuloma* property of the drugs helps in reducing the pain. *Mutrala* property of the drug helps to reduce increase frequency of micturition by frequent flow of urine. *Lavana rasa*, *Ushna Verrya* and *Tikshnaguna* of the drug *Vid lavana* causes *Amapachana*, and *Anulomana* of vitiated *Vata*. Due to *Vyavayiguna* of the drug it absorb fast in the body and reach to the targeted site by dissolve the stone and reduce the obstructed urine flow.

CONCLUSION

While treating *Mutrashmari* (renal calculi), *Samprapti Vighatana* as per *Dosha- Dushya Sammurchhana* should be the first line. The formulation act on *Dosadushya*. It can be concluded that *Brukkasulantaka Vati* markedly reducing pain, dysuria, increased frequency of micturition reduction of size and expulsion of calculus. The above

mentioned preparation does not have any systemic toxicity. The study opens door for further studies to evaluate the efficacy of *Brukkasulantaka Vati* in management of *Mutrashmari*.

REFERENCES

1. Kaviraj Ambikadutta Shastri, Sushruta Samhita, *Nidana Sthana*, Chapter- 3, Vol: 1, Chaukhambha Sanskrit Sansthan, Varanasi, Reprint: 2005, verse no. 21-23.
2. Kaviraj Ambikadutta Shastri, Sushruta Samhita, *Nidana Sthana*, Chapter- 3, Vol: 1, Chaukhambha Sanskrit Sansthan, Varanasi, Reprint: 2005, verse no. 4.
3. Kaviraj Ambikadutta Shastri, Sushruta Samhita, *Nidana Sthana*, Chapter- 3, Vol: 1, Chaukhambha Sanskrit Sansthan, Varanasi, Reprint: 2005, verse no. 5.
4. Kaviraj Ambikadutta Shastri, Sushruta Samhita, *Nidana Sthana*, Chapter- 3, Vol: 1, Chaukhambha Sanskrit Sansthan, Varanasi, Reprint: 2005, verse no. 6.
5. Kaviraj Ambikadutta Shastri, Sushruta Samhita, *Nidana Sthana*, Chapter- 3, Vol: 1, Chaukhambha Sanskrit Sansthan, Varanasi, Reprint: 2005, verse no. 3.
6. Kaviraj Ambikadutta Shastri, Sushruta Samhita, *Sutraa Sthana*, Chapter- 33, Vol: 1, Chaukhambha Sanskrit Sansthan, Varanasi, Reprint: 2005, verse no. 4.
7. Rasatantrasara & Siddhaprayoga Samgraha (*Ashmari Rogadhikara*), Krishna Gopal Ayurved Bhawan, Ajmer, Rajasthan verse no. 10.

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