

# Role of Varuna Kwatha in the Management of Mootrashmari W.S.R to Urolithiasis

Gupta Lokesh<sup>1</sup>, Vardhan Swati<sup>2</sup>, Sharma Satakshi<sup>3</sup>

<sup>1</sup>Professor, Shalya Tantra Department, CDL College of Ayurveda, Haryana, India  
Ph no 9991924528

<sup>2</sup>Associate Professor, Rachna Sharir Department, CDL College of Ayurveda, Haryana, India  
Corresponding Author Email: [dr.swati.vardhan\[at\]gmail.com](mailto:dr.swati.vardhan[at]gmail.com)  
Ph. No. 8295667737

<sup>3</sup>Associate Professor, Ras Shastra Evum Bhaishajya Kalpana Department, CDL College of Ayurveda, Haryana, India

**Abstract:** *In the present era, the disease Mootrashmari is very common among the human population due to the unwholesome dietary habits and sedentary life style. Many information are available in the ayurvedic classic regarding Mootrashmari including its various etiological factors, pathogenesis and different treatment modalities. A humble effort to understand the condition in Ayurvedic aspect was done and "mootrashmari" was one condition found to be similar to urolithias on basis of symptoms. The efficacy of Varuna kwatha in the management of mootrashmari is evaluated in this study. To envisage the present study assessment of the efficacy of the Drugs in Mootrashmari was conducted on 20 patients.*

**Keywords:** Mootrashmari, varuna kwatha

## 1. Introduction

Body is composed of Dosha, Dhathu and Mala. These Malas are produced as result of digestion and metabolism of food, and these should be eliminated from the body through their respective channels. Among these Mutra is one of the Drava mala, For the production and excretion of Mutra specialized system is present in our body that is called as "Mutravaha srotas." "Ashmari" is the one of the most common disorder of the Mutravaha srotas. In modern contemporary science the disease can be correlated with nearest clinical entity "Urinary calculus" or "Urolithiasis."

Urolithiasis is a global problem. The cause for the Urolithiasis is still obscure. The incidence of calculi varies as per geographical distribution, sex and age group. It affects up to 5% of the population, with a recurrence rate of 50 to 80%. The incidence of urinary stone is very high i.e. more than 30 people out of 10,000 in Northern India, Pakistan and Northern Australia is noticed. Males are more frequently affected than the females and their ratio is 4:3<sup>1</sup>. The incidence is still higher in the age group between 20-30 years.

Urolithiasis is a disease which if untreated may lead to hydroureteronephrosis, hydronephrosis, infection etc; cause pain which is severe, colicky and intolerable and in extreme cases may lead to permanent damage to the kidney function and inturn kidneys. Hence, there is a need to understand the disease and to find an effective and economical remedy to this widely prevalent disease.

Although there are many treatment modalities like Extra corporeal Shock Wave Lithotripsy But these procedures are very costly and limited to urban areas only. Moreover these procedures require a bit of setup to be carried out and are not hassle free.

In Ayurvedic text books lot of yogas have been mentioned in this regard which are easy to prepare, easily available, affordable and effective. Our acharayas have after their vast experience mentioned these yogas in these books.

In present study also I have taken as trial drug Varuna kwatha akel aushadhi prayog to be taken orally with water as mentioned in Chakradatta for urolithiasis which is not only hassle free to administer but is convenient to the patient also.

### Objectives

- To evaluate the efficacy of Varuna kwatha in mootrashmari.
- To review the literature related to mootrashmari

## 2. Review of Literature

### Vyutpatti:

The term Ashmari is derived from the root "Ashu" which has the Ashmara meaning "Sanghata". When Ashu dhatu is suffixed by mainn as krit pratayaya it results in the derivation of the term Ashman. This is added with 'Ra' to form .The streelinga pratayatyia added to Ashmara results in the formation of the term Ashmari.

### Nirukti:

"Ashmanam Rati Dadati Iti Ashmari"

The one which is converted into a hard mass resembling a stone (Ashma) is called Ashmari.

### Nidana of Ashmari

Sushruta samhita is the only classical text book among Brihatrayee, which has described ashmari as a separate disease entity with its etiological factor.

Hareeta samhita is another primary source of information regarding the causative factor of ashmari. Two distinct causative factors described by Acharya Sushruta are firstly, Asamashodhana sheelata and second is Apathyasevana. Astanga Hridaya has mentioned mutravrodha as the important etiology of ashmari. Hareeta samhita adds one more factor to the list of etiology; pitrumatrikadasha

Asamashodhana Sheelata, Apathya, Mootraavrodha, Pitrumatrika Dosha, Samashana, Adhayashana, Viruddha Ahar, Sheeta Ahar, Snighdha Ahar, Guru Ahar are nidanas of ashmari

#### **Purvarupa**

Basti peeda, Shepha vedana, Bastishirovedana, Asanna desha shoola, Muska vedna, Mutra krucchra, Sandra mutra, Avila mutra, Jwara, Aruchi, Avasadaglangani, Basta gandhi mutra, Basti adhmaana

#### **Rupa**

Pain is the predominant symptoms such as basti vedna etc. are due to vata prakopa resulted by margavrodha. Sarakta mutra in particular can be attributed to kshata caused by the obstruction to the passage of urine. Peeta mutra is due to pitta dosha. Atyavila mutra, Sasikta mutra are manifested due to kapha dosha. Because of apana vata vikriti and due to vedana, frequent micturition and defecation occur. The rest of the symptoms are either due to the provocation of tridosha or due to srotorodha.

#### **Bheda of ashmari:**

All the Acharyas except Sushruta have classified the disease Mootrashmari into four types<sup>4</sup> i.e.

- a) Vataja Ashmari
- b) Pittaja Ashmari
- c) Shleshmaja Ashmari
- d) Shukraja Ashmari

Acharya Charaka has considered Mutrashmari as a variety under Mutrakrichhra and classified it into Mridu Ashmari and Kathina Ashmari on the basis of consistency. Shukraja, Pittja and Kaphaja varieties are the Mridu where as Vataja variety is Kathina.

#### **Types of Renal Calculi<sup>5</sup>**

Basically the renal stones can be divided into two major groups

- 1) Primary stones
- 2) Secondary stones.

#### **Primary Stones**

They appear in apparently healthy urinary tract without any antecedent inflammation.

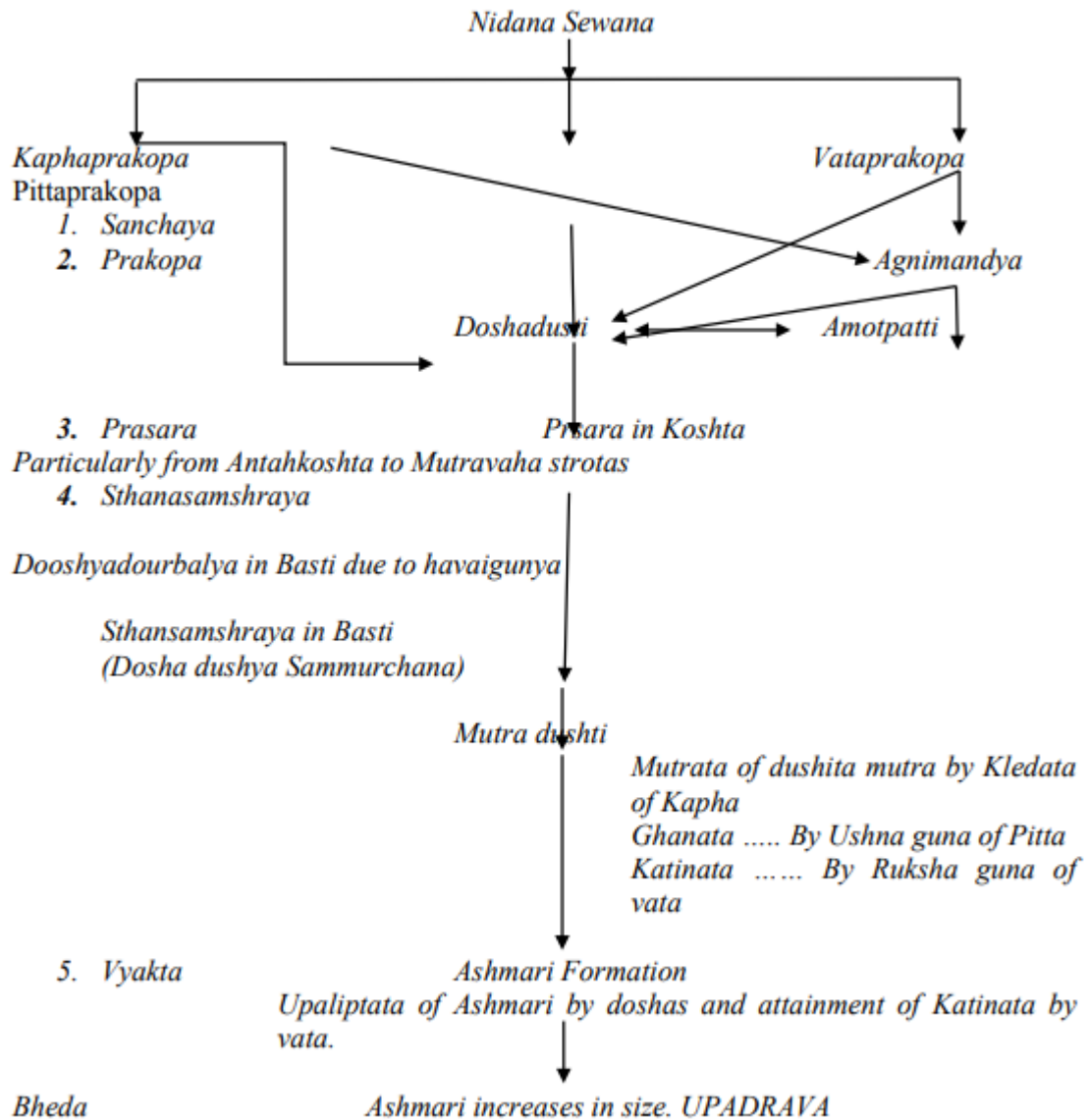
- a) Calcium oxalate
- b) Uric acid calculi
- c) Cystine calculi
- d) Xanthine calculi
- e) Indigo calculi.

#### **Secondary Stones**

They are usually formed as the result of inflammation.

- a) Triple phosphate calculus
- b) Mixed stones.

#### **Showing the Schematic Presentation of Ashmari Samparpti**



### UPADRAVA

Upadrava are the manifestation which appears at the later period of disease. Information regarding Updravas of Ashmari as mentioned in the classic are as follow:

Sharkara, sikata meh, mutraghat, baddhamutra, prashuna nabhi and teevra ruja<sup>6</sup>. The Updrava which are produced when the calculi obstructs the passage of urine are also depicted in classics. They are<sup>7</sup>:

- 1) Daurbalya
- 2) Sadana
- 3) Karshya
- 4) Kukshi shoola
- 5) Aruchi
- 6) Panduta
- 7) Ushna vata
- 8) Trishna
- 9) Hritpeedana and
- 10) Vamana

### CHIKITSA

#### Chikitsa:

The principles adopted in the treatment of Mutrashmari are listed below after knowing the Bala of Roga as well as Rogi, by the different Acharyas

#### According to Acharya Sushruta:

The treatment is specified on the basis of clinical features, duration and complications.

- Purvaroop Lakshanas- Snehadi procedures.
- Initial stage of Disease- Bshesaja Chikitsa
- Pravradha avastha -Shastra karma<sup>8</sup>.

#### According to Acharya Charaka:

The Chikitsa principles of Kaphaja and Vataja mutra krichra are to be adopted in the management of Mootrashmari<sup>9</sup>. Chakrapani opines that both the measures have to be combined in the management.

Acharya Vagbhata, opines that principles of treatment used for Sannipataja Mutraghata is utilized, based on the predominance of Dosha<sup>10</sup>.

#### Shodhana Karma (Snehadi procedures)

- This is adopted in the purvaroopavastha of the Ashmari.
- *Snehadi* is interpreted as Sneh, Sweda, Vamanadi by Arunadatta.
- As Ashmari is a Tridoshaja Vyadhi whatever Shodhana therapy is advised in Mutrakrichra is to be adopted according to the Doshic predominance. (e.g. In Vataja Ashmari, the therapy advised in Vataja Mootrakrichra is

to be adopted, where Abhyanga by Vatahara Thailas, Niruha Basti, Uttara Basti, Upanaha, Parisheka, with VataharaTtailas or Kwathas are carried out).

Management of Ashmari with Shodhana therapy in the stage of Purvaroopas helps in checking the Manifestation and Aggravation of disease during the Doshadooshya Sammurchana stage itself. Hence the Shodhana Chikitsa is beneficial by the process of Elimination of Morbid Doshas. Once Ashmari is formed and hardened the related Doshic nature in it also changes. There is no positive effect of Shodhana on Ashmari, which is already formed.

#### **Shamana Karma (Bheshaja Chikitsa):**

Acharya sushruta says that before undergoing Shastra karma one should try to manage with oral medications like Gritha, Kshara, Kashaya etc.

Ghritha – Vatika ashmarihara ghritha, Veera taruvadi ghritha<sup>11</sup>  
Kshara – Tila kshara, Palasha kshara, Kadali kanda kshara  
Kashaya – Varunadi kashaya, Punarnava kashaya.

#### **Shastra Karma:**

Acharya Sushruta has mentioned that the surgical line of treatment must be employed in following patients-

- Ashmari of Pravruddavastha,
- All the measures previously mentioned fail.

Acharya Sushruta was the first person to mention the surgical management in the context of Mootrashmari. During his explanation he has elaborately dealt with the consequences and complications faced after surgery. He has explained the Pre-operative, Operative and the Post-operative procedures with actual Techniques and Instruments. Indications, Contraindications and the Complications.

### **3. Materials and Methods**

#### **Source of Data:**

Patients were selected from OPD and IPD of Shalya Chikitsa Department of Desh Bhagat Ayurvedic College and Hospital, Mandi Gobindgarh, Punjab

#### **Method of collection of data**

Study was carried out on the patients diagnosed as suffering from mootrashmari (urinary calculi) in the age group 16 – 50 irrespective of sex, religion, economic status and occupation. The total number of patients taken for study were 20 excluding dropouts.

Patients were administered with Varuna kwatha.

#### **Inclusion criteria:**

- Patients presenting with the signs and symptoms of mootrashmari (urinary calculi) were selected for study, irrespective of chemical composition of calculi.
- The age group between 16 -50 years.
- Single urinary calculi measuring up to 5 mm.
- Recurrent stones were also included in the study.
- Patients who were not willing to undergo invasive or non-invasive surgical intervention.

#### **Exclusion Criteria:**

- Multiple stones, size more than 5 mm.
- Chronic systemic diseases like diabetes mellitus, HIV, BPH etc.
- Disease related complications like Hydro nephrosis, uraemia, pyuria etc.
- And bilateral stones were excluded.

**Study Design:** Clinical Study.

**Sample Size:** Total number of patients taken for study were 20 excluding dropouts

**Follow up:** Was done once in 2 weeks up to 6 weeks.

#### **Assessment of results:**

Depending upon subjective and objective criteria, assessment of the response was made

#### **Parameters of the study:**

**Table 1**

Subjective Parameters		
No	Parameters	Grade
I	<b>PAIN:</b>	
	Absence of pain	0
	Present, In undisturbed level	1
	Present, But disturbs daily routine, Impossible without medicade.	2
	Pain intolerable	3
II	<b>Burning Micturition:</b>	
	No burning micturition	0
	Present but easily bearable	1
	Present but difficulty to tolerate	2
	Simply unbearable	3
III	<b>Haematuria:</b>	
	Absent .	0
	Occasionally and Traces.	1
	Present, frequently noticeable	2

#### **Objective criteria:**

Sl. No.	Stone Size	Before treatment	After treatment
1.	Size		

**Size:** Size of the stone was assessed ultrasonologically.

On the basis of these, scoring criteria has been prepared and patients were categorized as:

- 1) Marked Response : 75 – 100%
- 2) Moderate Response : 50 – 74%
- 3) Poor Response : 26 – 49%
- 4) No Response : 0 – 25%

#### **Investigations:**

- Urine test for
  - Urine routine
  - Culture and sensitivity if necessary
- Blood test for
  - Serum urea and creatinine
  - Uric acid and Serum Calcium if necessary.
- USG of KUB region.
- X- Ray KUB region.

**Discussion on results of objective parameters:**

**Size of stone:** the drug showed significant response in reducing the size of stone. This can be attributed to the ashmaribhedan properties of both the drugs.

**Probable mode of action of drugs:**

In the drug review, Varuna kwatha is discussed and its action on doshas and their properties has been elaborated.

On the basis of rasa, the drug has *Kashaya and Tikta pradhan rasa* which in turn responsible for the Kapha shaman and thus relieves sign and symptoms.

Thus lekhan, bhedan property of dravyas are responsible for the reduction and expulsion of stones and more over does the pacification of symptoms.

Recent studies revealed more information regarding the drug:

**Varuna-** is known for Oxitocic, Antibacterial, Spasmodic, Cholinergic, Diuretic, Antiarthritic, Corticosteroid like activity, Lithotropic, Spasmodic, Antiinflammatory, Antipyretic, Antifertility properties.....Ref Ayurveda Consultants.com

**4. Conclusion**

After thorough analysis and systemic clinical work, the following conclusions can be made on the action of formulation Varun kwatha in the management of Mootrashamri w.s.r. to Urinary Calculi – A clinical study.

- 1) In this observational study based on occupation, food habits etc, high prevalence rate of Ashmari is seen in agriculturists and labourers. Their work is hard causing excessive sweating along with improper dietary habits. This leads to decreased urine output along with other disturbances in urine like super saturation, alteration in colloid crystalloid ratio etc. which are precipitating factors for urolithiasis<sup>13</sup>
- 2) The similarities between Ashmari and Urolithiasis have been highlighted.
- 3) In this observation it was found that, the lithotryptic action of both the drugs was highly significant.
- 4) The study was conducted by administering the drug for 42 days; it was found that the clinical features like pain, burning micturition and haematuria were reduced significantly.

**5. Scope of Further Study**

- 1) Any person desirous to conduct research on the same topic should extending the duration of treatment for more fruitful result.
- 2) As the study was conducted over a small sample, a similar study should be performed over a large sample for a longer period to get precise results.
- 3) Study based on the type of stone along with the effects of the drugs on the particular stones should be conducted.
- 4) The effect of the drug along with shodhan therapy should have to be checked. This may be fruitful then kevala *samanya prayoga*

**References**

- [1] Baily&love –Short practice of surgery, Edited by- R.C.G. RUSSEL 23<sup>rd</sup> edition, Hodder Arnold(London).pg no.11
- [2] Sh.Govind Dass ji, Bhaisajya ratanavali ,chapter no. 35.shloka no. 8
- [3] Chakrapanidatta, chakradatta ,chapter no.34 shloka no.23, edition 2012, chaukhamba surbharti prakashan, varanasi
- [4] Dr. Anantharam Sharma Susrutha Samitha, Nidana Sthana, Chapter No.3, Shloka No.8, 9, 10 &12 2004 Edition, Chaukhambha Sanskrit Prathishtan, Varanasi, Pg. No.483,
- [5] S.Das A Concise Text Book of Surgery, , 3<sup>rd</sup> Edition, 2004, Published by- S.Das, Calcutta, , Pg. No.1167
- [6] Dr. Anantharam Sharma Susrutha Samitha, Sutra Sthana, Chapter No.33, Shloka No.12 2004 Edition, Chaukhambha Sanskrit Prathishtan, Varanasi, , Pg. No.260,
- [7] Dr. Anantharam Sharma Susrutha Samitha, Nidana Sthana, Chapter No.3, Shloka No.16, 2004 Edition, Chaukhambha Sanskrit Prathishtan, Varanasi, Pg. No.485
- [8] Dr. Anantharam Sharma Susrutha Samitha, Chikitsa Sthana, Chapter No.7, Shloka No.3 & 4, , 2004 Edition, Chaukhambha Sanskrit Prathishtan, Varanasi. Pg. No.234
- [9] Dr. Brahamananda Tripathi, Charak Samitha, Chikitsa Sthana, Chapter No.26, Shloka No.59, 2008 edition, Chaukhambha Surbharathi prakashan, varanasi. , Pg. No.875,
- [10] Dr. Brahamananda Tripathi, Astanga Hridayam, Chikitsa sthana, Chapter No.11, Shloka No.15, editor 2009 Edition, Chaukhambha Surbharathi prakashan, New varanasi. Pg. No.708
- [11] Dr. Brahamananda Tripathi, Astanga Hridayam, Chikitsa sthana, Chapter No.11, Shloka No.18-19-20, Editor 2009 edition, Chaukhambha Surbharathi prakashan, New Varanasi, , Pg. No.709
- [12] www.motherherbs.com/saraca-asoca.html.
- [13] Prof. G.S lavezkar Clinical studies of certain ayurvedic formulations in the management of mootrashmari(Urolithiasis),Pg no-80, Published By- central council for research in ayu. and siddha and. New delhi 2008