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Review Article

# AYURVEDA PERSPECTIVE ON *MOOTRASHMARI* AND ITS MANAGEMENT: AN LITERATURE BASED REVIEW

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### ABSTRACT

The formation of stone is one of the common problems of urinary system and as per modern science only few medicines are available for such condition along with surgery. It is second most common disease of urinary tract with high recurrence rate. The common symptoms of ureter culculi are pain, haematuria, burning micturition, dysurea, tenderness and sometimes fever. Ayurveda described *Mootrashmari* as urinary calculus disease of *Mutravaha Srotas* and considered as *Asthamahagada*. Ayurveda described various treatment approaches for the management of disease; use of herbs, ayurveda formulation and *Kshara*, etc. this article presented summarative review on *Mootrashmari*.

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### INTRODUCTION

*Mootrashmari* is a disease of urinary tract which causes problems in many ways including passage of urine. The waste material when not dissolve completely in urine and obstruct urinary path then it *Mootrashmari* may occur which termed as stone in modern science<sup>1-5</sup>. The *Ashmari* (Urolithiasis) mainly formed by calcium may be due to the lack of citrate which dissolve waste product. The low level of magnesium and pyrophosphate also cause *Mootrashmari*. It is believed that approximately 5% to 8% people are suffering from the disease now a day's. This article aimed to deal with ayurveda and modern perspective of *Mootrashmari*, its complication and treatment<sup>4-8</sup>. The article presents pathogenesis, symptoms and management modalities of *Mootrashmari* along with suggested conduct of life to prevent disease recurrence.

**Definition:** Urolithiasis means Uro+Lithiasis; formation of stony concretions in the kidney, urinary tract or specifically bladder.

Consumption of contaminated water and food, disturbed life style, low intake of water, consumption of salty food and packed soup may be the causative factor of disease. Heredity, geographical condition and socioeconomic condition also play vital role towards the disease prevalence.

**Purvarupa**

*Mootrashmari* possess symptoms like abdominal pain, dysuria, hematuria and burning sensation through urinary tract. The prevalence of disease mainly occurs in hot, arid areas than temperate regions.

**Smprapti (According to ayurveda)**

*Ashmari* involve development of a calculus as a foreign body inside the urinary system; kidney, ureter and bladder.

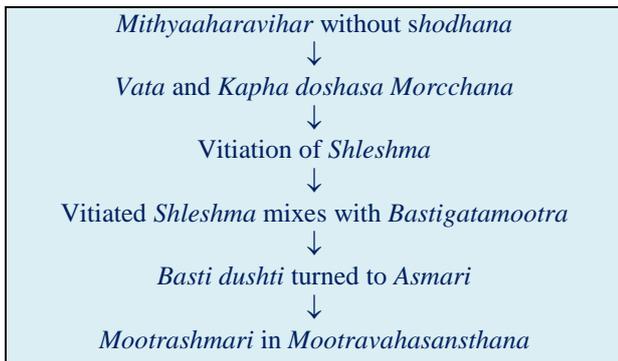


Figure 1: pathogenesis of *mootrashmari* as per ayurveda

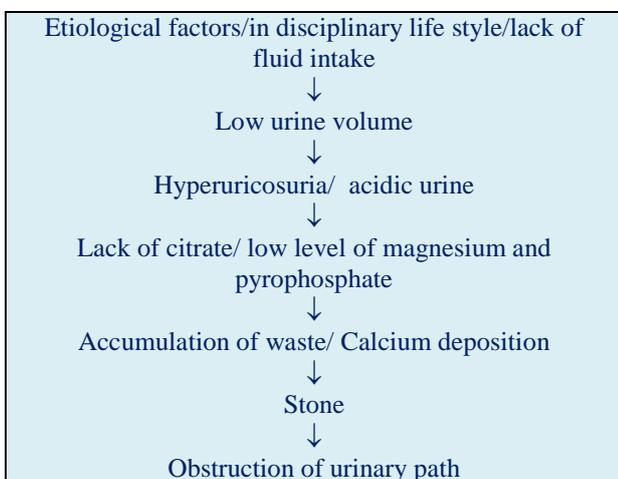
**Pathogenesis as per Modern Science:**

Figure 2: Pathogenesis of Urolithiasis as per modern science

It is believed that dries up of urine by *Vayu* the *Asmari* leads calculus development in urinary system another aspect of formation of calculus believe that lack of cleansing procedures and indiscrete dietary habits leads aggravation of *shleshma* which enters into urinary bladder after mixed with urine and produces calculi. Drying of *kapha dosha* by *vata* and *pitta dosha* also initiate pathogenesis of disease<sup>6-9</sup>.

**Classification as per Ayurveda**

Ayurvedic science also described various types of calculi as follows:

- *Vatika*
- *Paitika*
- *Shlaishmika*
- *Shukraja*

**Classification as per Modern Science**

The modern science described four types of urinary calculi based on their chemical constitution and morphology:

- Calcium Calculus
- Uric Acid Calculus
- Cystine Calculus
- Mixed Calculus

The *Vatika*, *Paitika* and *Shlaishmika ashmari* resembling calcium oxalate, uric acid and phosphate calculi respectively.

**Table 1: Various types of *Mootrashmari* and their descriptions**

S. No.	Types of <i>Mootrashmari</i>	Description
1	<i>Vataashmari</i>	Dusty, hard, irregular and rough stones. Severe pain during passage of urine and stools.
2	<i>Pittaashmari</i>	Reddish, yellowish and blackish stones. Sucking pain, burning sensation and <i>ushnavata</i> .
3	<i>Shleshmaashmari</i>	White, unctuous and big size stones. Dysuria, incising and pricking pain.
4	<i>Sukraashmari</i>	Mainly found in adults, frequent coitus or coitus interruption. Dysuria, swelling and lower abdominal pain.

*Ashmari* mainly occur in man than women around 18 – 40 years of ages. The modern approaches of treatment involve use of extra corporeal shock wave lithotripsy, leaser techniques, open surgery and leproscopy surgery etc, while Ayurveda *Sushruta Acharya*, *Charaka Acharya* and *Vagbhata* recommended use of drugs (herbs and formulation) followed by *Ghrita*, *Kshara*, *yavagu*, *kshir* or *kwatha* and surgical approaches for the management of disease<sup>8-12</sup>.

**Investigation**

Following investigations recommended generally for the diagnostic purpose of *Mootrashmari*:

- ❖ Blood urea
- ❖ Serum creatinine
- ❖ Serum uric Acid
- ❖ Serum calcium
- ❖ Serum Phosphorus
- ❖ Urinary calcium
- ❖ CBC
- ❖ Urine-R
- ❖ X-ray (KUB)
- ❖ USG (KUB)

## AYURVEDA MANAGEMENT OF MOOTRASHMARI

Acharya Sushruta, Charaka and Vagbhata mentioned several types of approaches for the management of disease such as; Shamana therapy, Shodhana therapy, Kshara, Pittaashmari and Sukraashmari therapy. The basic line of treatment aimed various aspect mentioned in Figure 3.



Figure 3: Primary approaches for the management of Mootrashmari

### Gokshuradi yoga and Pashanbhedadi ghrita

Gokshuradi yoga and Pashanbhedadi ghrita recommended for the management of Mootrashmari. Gokshuradi yoga possesses diuretic and lithotriptic qualities while Pashanbhedadi ghrita offer symptomatic relief in disease condition, it also offers soothing, cooling and diuretic properties. Formulations help to relieve symptom such as; Nabhivedana, Bastivedana, Mutradharasanga and Sarudhiramutrata.

The author of present article also worked to evaluate efficacy of Gokshuradi yoga and Pashanbhedadi ghrita in the management of Mootrashmari and findings of study proved efficacy of formulation in Mootrashmari.

### Paneeya kshara & Anandayoga

Paneeya kshara mentioned in the treatment of Mootrashmari since it possess properties like Chedana, Bhedana, Lekhana, Krimighna, Shodhana, Ropana and Vilayana, these all qualities believed to offer beneficial effects in effective removal of Mootrashmari. It

prevents chances of recurrence. The alkaline nature of Kshara neutralizes hyper tonicity and acidity of urine which change pH and help in the expulsion of stone. The chedana, bhedana and lekhan properties offer non invasive fragmentation of stone. While shodhana and ropana properties of kshara help to heal and maintain lacerated mucosal surface of the urogenital tracks. Shodhana properties of kshara therapy also relieve infection which may frequently during Mootrashmari.

The Anandayoga contains Tila panchaga, Apamarga panchaga, Palash kanda, Kadali kanda, Aamalki kanda. The yoga is recommended with Avimootra as Anupana which possess pitta shaman properties. The yoga relief abdomen pain, dysuria, offer mootrala (diuretic) property and increase intra luminal pressure which help in the expulsion of stone.

### Varunadi Kvatha

Varunadi kvatha with yavakshar prakshep reported to possess beneficial effects in urolithiasis. Application of Varunadi kvatha and yavakshar prakshep along with pathyapalan offer significant results in the management of disease. The ingredient of Varunadi kvatha such as; Varuna, Shilabhed, Shunthi, Gokshur and Yavakshar help to relief symptoms such as; pain, burning micturition, hematuria and dysuria.

### Apamargkshara and Yavakshara

Apamargkshara along with Yavakshara possess disintegration, dissolution, dislodging and expulsive property therefore recommended in mootrashmari. Kshara is formed by Basmikarana which make drug dry possessing gunas of vata. Basmikarana also imparts kaphaghna and vataghna properties into drugs. It also offers capacity to break due to its Agnisanskara process. Lavan rasa Kshara disintegrates ashmari; Ushnavirya dissolves it and prabhava help to expel out the ashmari. Kshara having pH more than 7 (alkaline) so it neutralizes acidic media, changes pH of urine and prevents urine to become concentrated which is considered as one of the reason of stone formation. Thus it is believed that Kshara therapy not only disintegrate, dissolve and expel stone but also prevent formation of stone<sup>9-15</sup>.

Table 2: Some important therapies recommended in Mootrashmari

S. No.	Therapies	Effects
1	Shamana Therapy	Administration of herbal drugs and herbal formulas offering analgesic, diuretic and lithotriptic properties. Varuna, gokshura, shilajitu, veerataru, brihati, kantakari, yava kshara, kushmanda and trapusa used in renal calculi.
2	Shodhana Therapy	Prepanchkarma; external and internal oleation, sweating and panchakarma procedures. Saindhavadi taila niruha vasti and vrushadi asthapana vasti are recommended in renal calculi.
3	Alkali Therapy	Kshara act as diuretics, lithotriptic and alkalizer. Palasa kshara, yava kshara and mulaka kshara are used in such therapy.
4	Vataashmari Treatment	Decoction of following drugs: Vasuka, satavari, gokshura, bhramhi, artagala, kubjaka, bhalluka and varuna destroys vatashmari.
5	Pittaashmari Treatment	Decoction of kusa, kasa, sara, satavari, pashana bheda, varahi, trikantaka, bhalluka, patha and kuruntika.
6	Sukraashmari Treatment	Seminal concretions in urethra removed by the badisha instrument.

Table 3: *Pathya* and *Apathya* in *Mootrashmari*

S. No.	<i>Pathya</i> in <i>Mootrashmari</i>	<i>Apathya</i> in <i>Mootrashmari</i>
1	Fluid intake	Limit salt intake
2	<i>Kulatha daal</i> , soup of rice, <i>kulatha</i> and <i>kusmanda swarasa</i> etc	Avoid milk and other dairy products
3	Exercise	Spinach, cauliflower, cabbage and peas
4	Food rich in vitamin A and Mg etc	Excess animal protein and red meat
5	Diet rich in fiber etc	Exposure to heat
6	Disciplinary life style	Alcohol consumption

### Recommended Yoga for *Mootrashmari*

- ❖ *Vajrasana*
- ❖ *Pawanamuktasana*
- ❖ *Uttana padasana*
- ❖ *Dhanurasana*
- ❖ *Pranayama*

### CONCLUSION

*Mootrashmari* is a disease of urinary system and obstruct urinary path which termed as stone in modern science. The *Mootrashmari* (Urolithiasis) mainly occurs

due to the calcium deposition which may be associated with lack of citrate and other etiological factors. Approximately 5% to 8% peoples are suffering from common symptoms of ureter calculi; pain, haematuria, burning micturition and dysurea. Ayurveda described various treatment approaches for the management of disease; use of herbs, ayurveda formulation and *Kshara*, etc. The good conduct of life (*Ahara-Vihara*) also play vital role towards the management of disease.

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