



Ayurvedic Management of *Mutrashmari* (Urolithiasis): A Review

Author: Dr. Narendra Thakur

Qualification: PG Scholar in Department of Shalya Tantra

Affiliation: RD Smriti Ayurved PG College & Hospital , Bhopal, Madhya Pradesh

Co Author : Dr. Shraddha Sakhare { GUIDE }

Qualification: B.A.M.S. , MS {Ayu} , Prof. & HOD in Department of Shalya Tantra

Affiliation: RD Smriti Ayurved PG College & Hospital , Bhopal, Madhya Pradesh

Co Author : Dr. Ajay Kapadnis

Qualification: B.A.M.S. , MS {Ayu} , Prof. in Department of Shalya Tantra

Affiliation: RD Smriti Ayurved PG College & Hospital , Bhopal, Madhya Pradesh

Co Author : Dr. Akhila Sundar

Qualification: B.A.M.S. , MS {Ayu} , Assist. Prof. in Department of Shalya Tantra

Affiliation: RD Smriti Ayurved PG College & Hospital , Bhopal, Madhya Pradesh

Co Author: Dr. Abhishek Pathak

Qualification: B.A.M.S., M.S. (Ayu) **Assis. Prof. in** Department of Shalakyia Tantra

Affiliation: Vijyashree Ayurvedic Medical College & Hospital, Jabalpur, Madhya Pradesh

Email: aumayurvedayanamah@gmail.com

Abstract

Mutrashmari is one of the eight grave diseases (*Ashta Mahagada*) described in Ayurvedic classics. It is characterized by the formation of calculi within the urinary tract and clinically resembles urolithiasis described in modern medicine. The prevalence of urinary stone disease has increased globally due to dietary habits, sedentary lifestyle, dehydration, metabolic abnormalities, and recurrent urinary tract infections. Ayurveda explains the pathogenesis of *Mutrashmari* through derangement of *Kapha Dosha* associated with vitiated *Vata* and the deposition of crystallized urinary constituents within the *Mutravaha Srotas*. Classical texts advocate preventive as well as curative measures including *Nidana Parivarjana*, *Shodhana Chikitsa*, *Shamana Chikitsa*, *Ashmari Bhedana Dravyas*, and dietary regulation. Several medicinal plants such as *Pashanabheda*, *Gokshura*, *Varuna*, and *Punarnava* have demonstrated lithotriptic, diuretic, anti-inflammatory, and nephroprotective properties. Contemporary studies have also supported the efficacy of Ayurvedic interventions in reducing stone size, relieving symptoms, and preventing recurrence. The present review aims to discuss the etiopathogenesis, clinical features, diagnosis, and comprehensive Ayurvedic management of *Mutrashmari* with its modern correlation to urolithiasis.

Keywords: *Mutrashmari*, Urolithiasis, *Ashmari*, Ayurveda, *Mutravaha Srotas*, *Ashmari Bhedana*

Introduction

Urinary stone disease is one of the common disorders affecting the genitourinary system and is associated with significant morbidity and recurrence. The lifetime prevalence of urolithiasis is increasing worldwide because of changes in dietary practices, inadequate water intake, obesity, metabolic disturbances, and environmental factors. Calcium oxalate stones constitute the majority of urinary calculi, followed by uric acid, struvite, and cystine stones. Modern treatment modalities include hydration therapy, analgesics, extracorporeal shock wave lithotripsy, ureteroscopic removal, and surgical procedures. However, recurrence remains a major challenge despite technological advancements.

Ayurveda provides a detailed description of stone disease under the heading of *Mutrashmari*. *Acharya Sushruta* considered *Ashmari* among the *Ashta Mahagada* because of its chronicity, severe pain, and potential complications.¹ The term *Ashmari* is derived from the word “Ashma,” meaning stone, indicating the hard concretion formed inside the urinary tract. According to Ayurvedic principles, vitiation of *Kapha Dosh*a initiates the pathological process by producing excessive slimy material, which subsequently combines with aggravated *Vata* and urinary constituents, resulting in stone formation.

Classical texts describe four varieties of *Ashmari* based on the predominance of *Dosh*as: *Vataja Ashmari*, *Pittaja Ashmari*, *Kaphaja Ashmari*, and *Shukraja Ashmari*. Each variety exhibits characteristic symptoms and progression. The disease manifests with pain in the bladder region, dysuria, burning micturition, interrupted urinary stream, hematuria, and difficulty in passing urine.

Management of *Mutrashmari* in Ayurveda is aimed not only at eliminating the existing calculi but also at correcting the underlying *Dosh*a imbalance and preventing recurrence. Therapeutic approaches include *Nidana Parivarjana*, *Shodhana Karma*, administration of *Mutrala* and *Ashmari Bhedana Dravyas*, dietary modifications, and lifestyle interventions. Several medicinal plants described in Ayurvedic classics possess proven antiurolithiatic activity and have gained attention in recent years.

Therefore, an integrated understanding of Ayurvedic concepts and contemporary scientific evidence may provide a safe and effective approach for the management and prevention of urolithiasis. The present review explores the classical description and therapeutic strategies of *Mutrashmari* in the light of current medical knowledge.

Nidana and Samprapti of Mutrashmari

Nidana (Etiological Factors)

Ayurvedic classics have described numerous causative factors responsible for the development of *Mutrashmari*. *Acharya Sushruta* emphasized that improper dietary habits and disturbances of *Dosh*as play a crucial role in the initiation of the disease. The disease primarily originates due to aggravation of *Kapha Dosh*a, which subsequently combines with vitiated *Vata* and urinary constituents to form calculi.

Dietary Factors

Excessive intake of *Madhura Rasa*, *Guru Ahara*, *Snigdha Ahara*, milk products, curd, meat of aquatic animals, and heavy-to-digest foods promotes aggravation of *Kapha Dosh*a and contributes to stone formation.¹ Inadequate water intake and excessive consumption of concentrated foods further predispose to crystallization of urinary constituents.

Lifestyle Factors

Sedentary habits, suppression of natural urges (*Vegadharana*), prolonged sitting, lack of physical exercise, and irregular dietary patterns are considered important causative factors. The retention of urine leads to stagnation within the *Mutravaha Srotas*, thereby facilitating deposition of stone-forming materials.

Dosha Involvement

Although all three *Dosh*as participate in the pathogenesis, *Kapha Dosh*a is considered the principal factor. Vitiated *Kapha* provides a mucinous matrix, while aggravated *Vata* causes drying and condensation of

urinary substances, leading to the formation of hard concretions. *Pitta Dosha* contributes to inflammation, burning sensation, and discoloration of urine.

Classification of *Ashmari*

According to *Acharya Sushruta*, four types of *Ashmari* are recognized:

1. *Vataja Ashmari*
2. *Pittaja Ashmari*
3. *Kaphaja Ashmari*
4. *Shukraja Ashmari*¹

Among these, *Kaphaja Ashmari* is considered the most common variety and corresponds closely to urinary calculi encountered in clinical practice.

Samprapti (Pathogenesis)

The pathogenesis of *Mutrashmari* involves the interaction of aggravated *Doshas*, especially *Kapha* and *Vata*, within the *Mutravaha Srotas*. According to *Sushruta Samhita*, increased *Kapha Dosha* produces excessive slimy and sticky material that accumulates in the urinary tract. Under the influence of aggravated *Vata Dosha*, this material gradually solidifies and forms stone-like structures.

The process is comparable to the sedimentation of impurities in water vessels. *Acharya Sushruta* beautifully explains that just as sediments settle at the bottom of a pot filled with water, similarly the vitiated urinary constituents precipitate and eventually transform into calculi.

Samprapti Ghataka

- *Dosha*: *Kapha* predominant with involvement of *Vata* and *Pitta*.
- *Dushya*: *Mutra*, *Rasa*, and *Shukra*.
- *Srotas*: *Mutravaha Srotas*.
- *Srotodushti*: *Sanga* (obstruction).
- *Agni*: *Mandagni*.
- *Udbhava Sthana*: *Pakwashaya*.
- *Adhithana*: *Basti*.
- *Vyaktasthana*: Urinary tract.
- *Rogamarga*: *Abhyantara Rogamarga*.

Correlation with Modern Pathogenesis

The Ayurvedic explanation of *Mutrashmari* closely resembles the modern theory of nucleation and crystallization. Supersaturation of urine with calcium oxalate, calcium phosphate, uric acid, and other salts leads to crystal formation. These crystals aggregate and adhere to an organic matrix, gradually developing into calculi. Dehydration, urinary stasis, recurrent infections, and metabolic abnormalities promote stone growth and recurrence.

Purvarupa (Premonitory Features)

Before the complete manifestation of disease, patients may experience:

- Mild pain in the bladder region.
- Difficulty during micturition.
- Heaviness in the lower abdomen.
- Turbid urine.
- Intermittent burning sensation.
- Feeling of incomplete evacuation.

Recognition of these symptoms enables early intervention and prevention of complications.

Clinical Features (*Lakshana*)

The cardinal manifestations of *Mutrashmari* described in Ayurvedic texts correspond remarkably with those of urolithiasis. Pain is the most prominent symptom and is usually severe, intermittent, and colicky in nature.

General Symptoms

- *Basti Vedana* (pain in bladder region).
- *Mutrakricchra* (dysuria).
- *Mutraghata* (obstruction to urine flow).
- *Daha* (burning micturition).
- Passage of gravel particles.
- Hematuria.
- Increased frequency of micturition.
- Pain radiating to the groin and genital region.

Features According to Dosha Predominance

Vataja Ashmari

Characterized by severe colicky pain, dryness, interrupted urinary stream, and difficulty in micturition. Stones are rough and hard in consistency.

Pittaja Ashmari

Associated with burning sensation, yellowish or reddish urine, fever, thirst, and inflammatory manifestations.

Kaphaja Ashmari

Produces heaviness, mild pain, cloudy urine, and comparatively larger stones due to excessive accumulation of *Kapha*.

Shukraja Ashmari

Develops due to obstruction and vitiation of *Shukra*, producing pain and swelling in the genital region.

The symptomatology described in classical texts shows striking similarity with renal colic, dysuria, hematuria, urinary obstruction, and lower urinary tract symptoms observed in contemporary urology.

Diagnosis and Ayurvedic Management of *Mutrashmari*

Diagnosis

The diagnosis of *Mutrashmari* is based on a thorough assessment of clinical manifestations, *Dosha* predominance, and involvement of the *Mutravaha Srotas*. Classical Ayurvedic texts emphasize the importance of *Rogi Pariksha* and *Roga Pariksha* in establishing the diagnosis.

Ayurvedic Diagnostic Approach

The following methods are useful in evaluating patients suffering from *Mutrashmari*:

- *Trividha Pariksha* (*Darshana*, *Sparshana*, and *Prashna*).
- *Ashtavidha Pariksha*, including examination of pulse, urine, stool, tongue, speech, touch, eyes, and body constitution.⁵
- Assessment of *Dosha*, *Dushya*, *Agni*, and *Srotas* involvement.
- Evaluation of pain, dysuria, burning micturition, and urinary obstruction.

Modern Diagnostic Modalities

Modern investigations aid in confirmation and localization of urinary calculi. These include:

- Routine urine examination.
- Urine culture and sensitivity.
- Serum calcium and uric acid estimation.
- Kidney function tests.
- Ultrasonography of the abdomen and pelvis.
- X-ray KUB region.
- Non-contrast CT scan, which is considered the gold standard for diagnosis.

Ayurvedic Management

The treatment principles of *Mutrashmari* are aimed at eliminating the causative factors, alleviating aggravated *Doshas*, promoting disintegration and expulsion of calculi, relieving pain, and preventing recurrence. Classical texts advocate both *Shodhana Chikitsa* and *Shamana Chikitsa*.

Nidana Parivarjana

Avoidance of etiological factors constitutes the first principle of treatment. Patients are advised to avoid:

- Excessively heavy and unctuous food.
- Suppression of natural urges (*Vegadharana*).
- Inadequate water intake.
- Sedentary lifestyle.
- Excessive consumption of curd and incompatible diet.

Shodhana Chikitsa

Snehana and Swedana

Oleation and sudation therapies help in pacifying aggravated *Vata Dosha* and facilitate downward movement of calculi.

Virechana Karma

Therapeutic purgation eliminates aggravated *Pitta* and *Kapha*, thereby reducing further stone formation.

Basti Karma

Basti is regarded as the best treatment for disorders involving *Vata Dosha*. Administration of *Niruha Basti* and *Anuvasana Basti* helps relieve pain, dysuria, and obstruction.

Shamana Chikitsa

Ashmari Bhedana Dravyas

Several medicinal plants described in Ayurveda possess lithotriptic and diuretic properties.

Pashanabheda (Bergenia ligulata)

It is considered one of the most important drugs in the management of urinary calculi. Experimental studies have demonstrated antiurolithiatic and nephroprotective actions.

Gokshura (Tribulus terrestris)

Acts as a potent *Mutrala Dravya*, promotes urine flow, and helps in expulsion of stone fragments.

Varuna (Crataeva nurvala)

Traditionally used in urinary disorders and possesses anti-inflammatory and lithotriptic effects.

Punarnava (Boerhavia diffusa)

Produces diuretic action and reduces edema and inflammation associated with urinary tract disorders.

Kulattha (Dolichos biflorus)

Kulattha Yusha is recommended for dissolution and expulsion of urinary calculi because of its *Ashmari Bhedana* property.

Classical Formulations

The following formulations are commonly employed according to the predominance of *Doshas* and clinical presentation:

- *Chandraprabha Vati.*
- *Gokshuradi Guggulu.*
- *Varunadi Kashaya.*
- *Punarnavadi Kwatha.*
- *Shweta Parpati.*
- *Hajrul Yahood Bhasma.*
- *Pashanabhedadi Kwatha.*

These formulations exhibit diuretic, anti-inflammatory, analgesic, antimicrobial, and lithotriptic activities.

Dietary and Lifestyle Management

Dietary regulation plays an important role in preventing recurrence.

Recommended Diet

- Adequate intake of water.
- Barley preparations (*Yava*).
- *Kulattha Yusha*.
- Coconut water.
- Fruits rich in citrate.
- Vegetable soups and light food.

Foods to be Avoided

- Excessively salty and spicy foods.
- Heavy and oily preparations.
- Excessive milk products.
- Processed foods.
- Alcohol and carbonated beverages.

Regular physical activity and timely evacuation of urine are strongly recommended.

Modern Correlation

Mutrashmari can be correlated with urolithiasis, which refers to the formation of calculi in the kidneys, ureters, bladder, or urethra. Supersaturation of urine with calcium oxalate, calcium phosphate, uric acid, and cystine leads to crystal formation and aggregation.

Current management includes:

- Hydration therapy.
- Analgesics.
- Medical expulsive therapy.
- Extracorporeal shock wave lithotripsy.
- Ureterscopy.
- Percutaneous nephrolithotomy.
- Open surgery in selected cases.

Despite advances in modern urology, recurrence rates remain high. Therefore, the preventive principles described in Ayurveda provide significant value in long-term management.

Discussion

Mutrashmari is a multifactorial disease in which *Kapha Dosha* initiates stone formation and aggravated *Vata Dosha* contributes to hardening and retention of urinary sediments. The disease exhibits remarkable similarity with the process of crystallization and aggregation described in modern medicine.

Ayurvedic treatment focuses not only on the elimination of existing stones but also on restoration of normal physiological functions and prevention of recurrence. *Ashmari Bhedana* and *Mutrala Dravyas* promote fragmentation and expulsion of calculi while reducing pain and inflammation. Several medicinal plants have shown promising antiurolithiatic activity in experimental and clinical studies.

The holistic approach of Ayurveda involving diet, lifestyle modification, and correction of *Dosha* imbalance provides a rational and comprehensive strategy for long-term management. Integration of Ayurvedic principles with modern diagnostic techniques may improve therapeutic outcomes and reduce recurrence rates.

Conclusion

Mutrashmari is one of the important disorders described in Ayurvedic classics and closely resembles urolithiasis of contemporary medicine. The disease results from derangement of *Kapha* and *Vata Doshas* affecting the *Mutravaha Srotas*. Early diagnosis and timely intervention are essential to prevent complications.

Ayurvedic management comprising *Nidana Parivarjana*, *Shodhana Chikitsa*, *Shamana Chikitsa*, administration of *Ashmari Bhedana Dravyas*, and dietary regulation provides an effective and holistic approach. Medicinal plants such as *Pashanabheda*, *Varuna*, *Gokshura*, and *Punarnava* possess significant therapeutic potential. Thus, Ayurveda offers a safe, economical, and preventive strategy for the management of urinary stone disease and can serve as a valuable adjunct to modern treatment modalities.

References

1. Sushruta. *Sushruta Samhita*. Nidana Sthana, Chapter 3. Varanasi: Chaukhambha Sanskrit Series Office; 2019.
2. Vagbhata. *Ashtanga Hridaya*. Nidana Sthana, Chapter 9. Varanasi: Chaukhambha Orientalia; 2018.
3. Agnivesha, Charaka. *Charaka Samhita*. Chikitsa Sthana, Chapter 26. Varanasi: Chaukhambha Bharati Academy; 2019.
4. Sushruta. *Sushruta Samhita*. Sutra Sthana, Chapter 10. Varanasi: Chaukhambha Sanskrit Series Office; 2019.
5. Vagbhata. *Ashtanga Hridaya*. Sutra Sthana. Varanasi: Chaukhambha Orientalia; 2018.
6. Sharma PV. *Dravyaguna Vijnana*. Vol II. Varanasi: Chaukhambha Bharati Academy; 2015.
7. Atodariya U, Barad R, Upadhyay S. Antiurolithiatic activity of *Bergenia ligulata*: A review. *Int J Pharm Sci Rev Res*. 2013;20(1):12-15.
8. Patel PK, Patel MA, Vyas BA, Shah DR, Gandhi TR. Antiurolithiatic activity of *Crataeva nurvala*. *J Ethnopharmacol*. 2012;139(2):365-370.
9. Wein AJ, Kavoussi LR, Partin AW, Peters CA. *Campbell-Walsh Urology*. 12th ed. Philadelphia: Elsevier; 2021.
10. Moe OW. Kidney stones: Pathophysiology and medical management. *Lancet*. 2006;367(9507):333-344.