# **Original Research Paper**



## **Ayurveda**

# ANALYTICAL STUDY OF TREATMENT MODALITIES OF MUTRASHMARI WITH SPECIAL REFERENCE TO UROLITHIASIS

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ABSTRACT The prevalence of urinary stone is approximately 3 to 5% in general population and is increasing across the world mainly due to metabolic derangement, global climatic changes. In Ayurveda the urinary stones also called to be Mutrashmari is one among the Ashtamahagada (eight fatal conditions) and described as Kaphapradhan Tridoshaja Vyadhi, which is correlated with urolithiasis. It is the major cause of morbidity. The lifetime prevalence of symptomatic urolithiasis is approximately 10% in men and 5% in women. Many treatment modalities have been adopted in medical sciences, but it is quite expensive and also the pathogenesis behind recurrence of formation of stone cannot be avoided. Hence, it is necessary to find out an economical effective, easily available medicine to treat Mutrashmari. Acharya Susruta said, before attempting surgical procedures one should try with oral medications like ghrita, paneeyakshara, taila etc. which possesses properties like chedana, lekhana, bhedana and mutrala for facilitating the disintegration of urinary stones. On the basis of such co-relations this study has been made to evaluate the efficacy of Shaman Chikitsa in Mutrashmari w.r.t. to urolithiasis.

## KEYWORDS: Mutrashmari, Ashtamahagada, urolithiasis, Shaman chikitsa

#### INTRODUCTION

Ashmari (urinary stones) is the condition in which there is formation of a substance like stone1. Mutrashmari (urinary stone) is one among the Ashtamahagada (eight fatal conditions)2. It is considered difficult to cure because of its Marma Ashrayatwa due to involvement of Basti, which is one of the Tri Marma (three vital parts), being the Vyakta Sthana3. It is Kapha predominance Tridoshaja Vyadhi4. As per the clinical features, it is compared to urolithiasis. It is the formation of stony concretions in the bladder and urinary system. It is the common diseases of Mutravaha strotas (urinary tract) that occur due to disequilibrium between stone inhibiting and promoting factors in the urinary system. Urolithia9sis is an effect of complex physic-chemical process, which involves sequence of events in the formation of any urinary stone, including urinary saturation, super saturation, nucleation and the growth of crystals, aggregation and retention of crystal, and finally formation of stone5. The lifetime prevalence of symptomatic urolithiasis is 10% in men and 5% in women, and the chance of the second stone formation within 5-7 years is approximately 50%. Of population due to the daily lifestyle and the dietary pattern of the peoples6. Increased percentage of urolithiasis in this world is associated with improved standard of living.

A urinary stone is the major cause of morbidity and is strongly associated with race, ethnicity, and region of residence7. A diet that is rich in cereals and pulses, intake of fruits such as grapes and oranges and fluoride-rich water, and taking a fruits such as oranges and grapes plays a vital role in the occurrence of urinary stone8. Many treatment procedures have been adopted in medical sciences to treat the disease but it is quite costly and also the prognosis behind recurrence of stone formation cannot be avoided. In alternative medicines, mainly surgery is described but as per Acharya Sushruta he said that before going for surgical procedures one should try with oral medications such as medicated alkali preparation, decoction, medicated ghee, and medicated oil, which possesses the properties such as diuretic, splitting, scarification, breaking, and cutting; it facilitates the dissolution of the urinary stones.

## DISCUSSION

As per the Nidan Panchak, the description of Hetu or the etiology or causative factors includes excess exercise, spicy food, urinary retention, and emaciation. The Purvaroop or the prodromal symptom includes Abdominal distension, indigestion, and burning micturition. Roop or manifestation of the disease can be assessed by abdominal pain, burning micturition, and Sarujamutrapravruti (pain while urination). Its Samprapti or patho-physiology of the disease of the above causative factors provoked Vata and Pitta Dosha and also urinary retention, which causes Kha-Vaigunya at Basti (urinary bladder) and Mutravahasrotas (urinary tract). Therefore, these Doshas enter in Basti and Mutravahasrotas leading to Bastishoth and

Mutravahasrotas Dushti (cystitis) with Dysuria at the same time due to Mandagni (hampering of digestive power); it disturbs the function of Pachaka Pitta (digestive fire), so there is no proper separation of Dosha, Mutra (urine), and Purisha (feces). Because of Apana Vayu, Dushti Mala is not excreted completely from body, which leads to accumulation of these mala in body so there is initiation of disease12.

Ashmari comes under Mutravaha srotovikara and Ashtamahagada as described in Susruta Samhita. In Sushruta Samhita it is explained that, the formation of Mutrashmari is due to drying up of Kapha because of the action of Vata and Pitta. Mutravega avarodha or vegadharana is another cause attributed to the formation of Ashmari. While dealing with the management Sushrutha stressed on usage of Ghritha, Kshara, Kashaya, Ksheera, Uttarabasti and finally Surgery as the last option 13. Urinary calculus is a stone-like body composed of urinary salts bound together by a colloid matrix of organic materials. It consists of a nucleus around which concentric layers of urinary salts are deposited. Ureteric stones usually originate in the kidney. Gravity and peristalsis both contribute the spontaneous passage into and down the ureter. The probable pathological changes are obstruction (partial/complete), impaction, infection, ulceration14. Many treatment modalities have been adopted in medical sciences to treat the disease in the Chikitsasutra of Mutrashmari. Acharya Charak explain that in the Kaphaj Mutraashmari, Kshara (medicated alkali preparation) and use of Ushna Tiksna Dravyapana is advisable. Acharya Sushrut said that before going for surgical procedures one should try with oral medications such as Kshara Kalpana (medicated alkali preparation), Ghrita (medicated ghee), and Taila (medicated oil), which possesses the properties such as Chhedana (cutting/breaking), Bhedana (splitting), Lekhana (scarification), and Mutrala (diuretic), and Kwath (decoction) for facilitating the disintegration of the urinary stones. As Yavakkshar is having Deepana and Pachana properties, so it may relieve the indigestion and it helps to breaking the pathogenesis of the urolithiasis. Because of its Bhedana (splitting) and Lekhana (scarification) properties, it breaks the urinary stones in small particles. Yavakshar is a potent urinary alkalizer with mild diuretic activity.

Thus, it reduces burning micturition. Yavakshar is a potent urinary alkalizer with mild diuretic activity. It reduces burning micturition. Shwetaparpati has diuretic and anti-inflammatory properties, so it can be responsible for reducing erythrocyte sedimentation rate level and the color of the urine. The Varundigana formulation pacifies Kapha Dosha by virtue of their Ruksha Guna, Katu Vipak, and Ushna Virya. Its Vatanulomana Shothahara and Mutrala properties help to relieve pain and Shotha. It is an effective remedy in management of urinary problems, including diuretic, lithotriptic (remove calculi or stones), and anti-spasmodic (removes spasm and pain) properties. Because of its lithotriptic property, it can tear the urinary stones and its diuretic property helps to flush out small stones from the urinary tract. Its

spasmodic property may help to relive pain and spasm. Thus, in total this formulation has the capacity to disintegrate the pathogenesis of the disease Ashmari and recurrence of urinary stone. Polyherbal Tablet This tablet contains Punarnava, Ushira, Chandana, Shweta Parpati, and Hajarulyashood Bhasma, which is used in urinary retention, difficulty in urination, urinary calculi, hematuria, burning, and difficulty in urination due to acidic urine. Medicine was given in the tapering dose to overcome the severity of the symptoms.

#### CONCLUSION

In Avurveda the urinary stones also called to be Mutrashmari is one among the Ashtamahagada (eight fatal conditions) and described as Kaphapradhan Tridoshaja Vyadhi, which is correlated with urolithiasis. It is the major cause of morbidity. The lifetime prevalence of symptomatic urolithiasis is approximately 10% in men and 5% in women. Many treatment modalities have been adopted in medical sciences, but it is quite expensive and also the pathogenesis behind recurrence of formation of stone cannot be avoided. Hence, it is necessary to find out an economical effective, easily available medicine to treat Mutrashmari. Many treatment modalities have been adopted in medical sciences to treat the disease in the Chikitsasutra of Mutrashmari. Acharya Charak explain that in the Kaphaj Mutraashmari, Kshara (medicated alkali preparation) and use of Ushna Tiksna Dravyapana is advisable. Acharya Sushrut said that before going for surgical procedures one should try with oral medications such as Kshara Kalpana (medicated alkali preparation), Ghrita (medicated ghee), and Taila (medicated oil), which possesses the properties such as Chhedana (cutting/breaking), Bhedana (splitting), Lekhana (scarification), and Mutrala (diuretic), and Kwath (decoction) for facilitating the disintegration of the urinary stones.

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