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Review Article

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LITERARY STUDY OF MUTRASHMARI WITH AYURVEDIC AND **MODERN VIEW**

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ABSTRACT

Now a days, several patients are reporting to the hospitals by regularly affecting with different Mutravaha Srotas disorders like burning micturation, renal stone diseases etc. Mutrashmari is one of the important diseases of Mutravaha Srotas. Mutrashmari is a very common disease which includes a complex physiochemical process that involves a series of events in formation of Ashmari i.e. stone. Description of Mutrashmari is available in almost all Samhita. In Ayurvedic literatures the types of Mutrashmari is based on the Lakshanas of Dosha and Ashma. In Ayurveda, both Shaman and Shodhana Chikitsa are described for the treatment of Mutrashmari.

Among all the urinary problems described in *Ayurvedic* texts, there is one variety where both the medicinal and the surgical treatments are advised by all the Acharyas and this entity is the Mutrashmari. Furthermore renal calculus occurs in both the sexes at all the ages but commonly in the 3rd and 4th decades, stone in kidney or in ureter is probably little more frequent in men than women.

KEYWORDS: Ayurveda, Mutravaha Srotas, Mutrashmari, Renal calculus.

INTRODUCTION

Ayurveda dealts with many dreaded diseases of Mutravaha Srotas under the heading of Mutrakriccha, Mutraghata, Mutrashmari etc. Mutrashmari is one of the most common and distressing maladies among urinary disorders. Ashmari is a disease related to Mutravaha Srotas in which an 'Ashma' meaning stone is formed in urinary system. It is a Tridoshaja Vyadhi with predominant Kapha Dosha. [1] Acharya Sushruta has mentioned it in Ashta Mahagadas. [2] Ashmari is a dreadful disease and has been regarded to be as fatal as Yamaraja

himself. In the early stages it is treatable by medicines but in advanced cases surgery is needed. [3]

According to *Acharya Charaka* the *Shukra Dhatu* in the *Basti* gets dried up along with *Pitta* or *Kapha Dosha* by *Vata* forms *Ashmari* like how *Gorochana* forms in Gallbladder of cow.^[4] When clear water is placed in a new mud pot, after sometimes some particles precipitates into the water, similarly in the *Basti Ashmari* develops.^[5]

A calculus is polycrystalline aggregates composed of varying amounts of crystalloid and organic matrix. Urinary calculus is a stone like body composed of urinary salts bound together by a colloid matrix of organic materials. The organic matrix is a mixture of mucoproteins and muco-polysaccharides. It consists of a nucleus around which concentric layers of urinary salts are deposited. In India, maximum prevalence occurs in Jammu and Kashmir, Punjab, Haryana, Delhi, Rajasthan, Madhya Pradesh and Gujarat (stone belt of India). Renal stones may occur due to metabolic disturbances, infections, hormonal influences, dietary conditions and habits or obstructions in the bladder or kidney or increased excretion of stone forming components such as calcium, magnesium, oxalate, carbonate, phosphate, urate, cystine etc. The major factors are supersaturation of urine with the offending salt and crystallization.

According to the *Ayurvedic* classics the structure which resembles stone is called as *Ashmari*^[9] or the one which is converted into a hard mass resembling a stone (*Ashma*) is called as *Ashmari*.^[10]

Acharya Sushruta has classified the disease Ashmari into 4 types they are - Vatashmari, Pittashmari, Shleshmashmari and Shukrashmari^[11]. Ashtanga Hrudaya, Ashtanga Sangraha, Madhava Nidana, Bhava Prakasha, Sharangdhara Samhita, Sharangdhara Samhita, Yogaratnakara have classified the disease Ashmari similar to that of Sushruta Samhita.

Acharya Charaka has described the Mutrashmari under Mutrakrichha and on the basis of consistency, classified Shukraja, Pittaja and Kaphaja varieties as Mrudu Ashmari, whereas Vataja variety of Ashmari as Kathina Ashmari. [18]

Nidana (etiology) - According to *Sushruta*, those who do not observe cleansing procedure and unhealthy diet and lifestyle are responsible for the formation of calculi. [19] *Acharya Charaka* described it under "*Mutrakrichha*". Hence the *Nidanas* of both *Mutrakrichha* &

Ashmari can be taken as same. They are practice of excessive physical exertion, strong medicines, *Ruksha Madyapana*, riding on a fast moving vehicle, excessive intake of *Anupamamsa* and *Matsya*, *Adhyashana*, *Ajeerna-bhojana*. In conventional medicine, three primary factors are considered responsible for renal calculus - supersaturation of stone-forming compounds in urine, presence of chemical or physical stimuli in urine and presence of inadequate amount of compounds in urine that inhibit stone formation. Heredity, geographical condition, dietetic factors also play a key.

Samprapti (pathology) - According to Ayurveda, by indulging in unhealthy diet and lifestyle, non purification of the body, Kapha gets aggravated and mixed with urine enters the urinary bladder and therein it produces Ashmari (calculi). The two basic aspects of pathogenesis of renal stone are as follows- (a) increased urinary excretion of stone forming substances like calcium, phosphorus, uric acid, oxalate and cysteine. (b) Physico-chemical change influencing stone formation like pH of urine, stone matrix and protective substance in urine. Urine should be supersaturated for precipitation of crystalline substance leading to formation of calculi in urinary tract. The agents modifying nucleation, crystallization, and aggregation pH of the urine also play important role in stone formation. [21]

Purvarupa^[22,23]

- Basti adhamanam distension of bladder due to retention of urine
- Aasannadeshe ruja severe pain at the site of Ashmari
- Bastishiromushkashephsamvedana pain in the region of bladder neck, scrotum and penis
- Bastipeeda pain in the bladder region
- Mutrakrichha difficulty in micturation due to irritation of bladder by calculus
- Dushtasandramutrata sedimentation of urine
- Aavilamutrata turbidity of urine
- Bastagandhatwam goat's urine like smell in the urine
- Aruchi anorexia
- Jwara fever

Samanya Lakshana^[24,25,26]

• *Nabhivastisevnimehana vedna* – pain during micturation occurs in any of these regionsthe umbilical region, bladder, perineal raphe and penis

- Mutradharasanga obstruction in the flow of urine
- Sarudhiramutrata haematuria
- *Mutravikirana* scattering of the urinary stream
- Gomedaprakasham shining like Gomeda jem
- Atyavilam mutram passage of turbid urine
- Sasiktam passage of sandy urine
- Vishirnadharam Passage of urine in multiple streams
- Mridnati medhram presses penis during micturation
- Muhuhshakrin increased frequency of defecation
- Muhuhmutram increased frequency of micturation
- Sukham mehedgachham when stone dislodges or comes out then patient get relief.

Vishishta Lakshana

	Vatashmari ^[27]	Pittashmari ^[28]	Kaphashmari ^[29]
Colour	Shyava varna	Madhu varna	Madhukapushpa varna, Shweta
Shape & appearance	Kadambapushpavat kantakachita, Parusha, Vishama, Khara	Bhallatakasthi Pratima, Sarakta,	Kukkutandatwak pratikasha, Snigdha, Mahati
Symptoms	severe pain due to obstruction to the flow of urine, due to excessive pain the patient clenches his teeth, squeezes the umbilical region, rubs the penis, touches the perineal region often and cries with agony, patient feels burning sensation and passes flatus, urine and stool with difficulty while straining for micturation.	Peeta, Krishna Obstruction to the flow of urine causes warmth, sucking, burning or throbbing sensation in Basti and this result in Ushnavata lakshana. The Ushnavata lakshanas are burning sensation in Basti, Medhra & Guda.	Obstruction to the flow of urine causes cutting, incising or pricking pain, heaviness and cold sensation in <i>Basti</i> .
Co-relation	Calcium oxalate stone	Uric acid and urate stone	Phosphatic stone

 $\mathit{Shukrashmari}^{[30]}$ - It develops only in the aged persons. Suppression of $\mathit{Shukra\ Vega}$ is main cause of formation of Shukrashmari. There is pain at Basti region, difficulty in micturation, swelling in scrotum. When squeezed by the hand, stones break in to small pieces in that place itself.

This is a rare condition, it can be compared with seminal concretions or the spermolith, which are not seen in ultrasonography or X-ray. Seminal calculi are very fragile in nature and can be crushed by fingers.

Chikitsa^[31] - In the prodromal stages of this disease oleation, etc. are advisable by which the disease may be totally eradicated. Treatment of Ashmari can be one or more of the following four types.

- 1) Aushadha Chikitsa
- 2) Basti Chikitsa
- 3) Kshara Chikitsa
- 4) Shastra Chikitsa

1) Aushadha Chikitsa

Drugs acting with following properties should be used.

- Ashmari bhedana promotes crushing of Ashmari
- Ashmari paatana helps in flushing out of Ashmari of small size
- Mutrala /Bastishodhaka- promotes diuretic action
- Mutra shulaghna/ Basti shulaghna relieves pain (spasmolytic action)
- Mutrakrichhahara soothing and antimicrobial action against urinary pathogens
- Mutranulomak/ mutravibandhaghna helps in relieving the barrier caused by Ashmari
- Pittashamak soothing action
- *Kshiprameva bhinnati* promotes crushing of stone quickly
- Chirakari Ashmari/ Pragadha ashmarihara helps in flushing chronic and dormant stones located in kidney.
- 1) Drugs used in Ashmari -Pashanabheda, Gokshura, Shilajit, Varuna, Usheera, Kantakari, Punarnava, Trapusa, Ela, Veertaru, Bruhati.
- 2) Basti Chikitsa Acharya Sushruta advised Uttarbasti in the management of Ashmari.
- 3) Kshara Chikitsa Acharya Sushruta has advocated preparing Kshara from the drugs mentioned above for preparing Ghrita. Most of the Kshara (alkaline materials) act as diuretics, lithotriptic, alkalizer, antispasmodic agents and are effective in the management of renal calculi For example Palash Kshara and Yava Kshara.
- 4) Shastra Chikitsa Surgery has to be the ultimate treatment because even with expert surgeons success is uncertain. In these cases, operation should be considered last of all,

when death is inevitable with non-operative treatment. It should be carried out by the well meaning persons after taking the consent of the authorities.

DISCUSSION

Mutrashmari can be correlated with renal stone. It is one of the most common and painful diseases of urinary system. Acharya Sushruta has described the problem of Mutrashmari under Ashtamahagada. The cause of disease is still unknown. But in Ayurveda, Kapha Dosha in excessive quantity has been accepted as the main reason for the formation of *Mutrashmari*. Among all the urinary problems described in *Ayurvedic* texts, there is one variety where both the medicinal and the surgical treatments are advised and agreed upon by all the Acharyas and this entity is the Mutrashmari.

Ayurvedic drugs has potential to act as antilithogenic by multiple actions such as diuretic, alteration of physiological pH, regulates crystalloid imbalance, antimicrobial activity, antiinflammatory, analgesic activity and improve renal function.

CONCLUSION

Based on explanations available from both treatises of Ayurveda and modern medical science, it can be concluded that Vataja Ashmari is calcium oxalate stone, Pittaja Ashmari is uric acid or urate stone and Kaphaja Ashmari is phosphate stone. Renal stone is a common trouble effecting people all around the world and frustrating physicians and surgeons by its recurrence, herbal drugs may prove beneficial here and should be given a chance. They may come out as a miracle for the management and prevention of recurrent renal stone.

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