

STUDY OF MUTRASHMARI UROLITHIASIS AND IMPORTANCE OF PATHYA IN MUTRASHMARI

Shushma R. Khirodkar¹, Arun U. Wankhede², Ishan M. Borkar³

¹Assistant Prof. Dept. Of Swasthavritta

²Associate Prof., ³PG Scholar, Dept. Of Roganidan

Yashwant Ayurvedic College, PGT&RC, Kodoli, Maharashtra, India

Email: borkar_ishan@rediffmail.com

ABSTRACT

Mutrashmari also known as renal calculus is commonly occurring now a days because of unhealthy food and living habits. It is one of the increasing diseases at all ages. In *Ayurved*, Acharya Sushrut had given detail description about *Mutrashmari*. In modern *Mutrashmari* is termed as Urolithiasis i.e formation of stone in urinary system. Urolithiasis disturbs the normal life of patient causing multiple symptoms such as severe radiating pain from back of lumbar region, burning micturation, haematuria, fever etc. The important management of the *Mutrashmari*-Urolithiasis is following *Pathya* and avoiding causative factors such as calcium rich diet, water which is hard to digest, high protein diet such as excess non-veg food. One should drink water sufficient quantity, consume food timely and not to suppress the urge of micturation.

Key words: - *Mutrashmari*, Urolithiasis, *Pathya*.

INTRODUCTION

According to *Ayurved Srotovaigunya* resulting from *Dushit Kapha* localised in *Basti* in conjunction with *Pradushit Vata* and *Pitta* is responsible for the formation/cause of *Ashmari*. Initially vitiation of *dosha* occurs in the *Mutravahasrotasa*, may be catalyzed by the presence of lesion and ultimately be held responsible in the pathogenesis of *Mutrashmari*.

Further according to modern science, the formation of stone in urinary system is one of the main problems of urology. The cause and

mechanism of their formation is still uncertain. On one hand, surprisingly stone does not always form when such factors are present and on the other hand stones may develop when factors are apparently absent too.

Apart from it the main treatment for urinary calculi falls into following categories: -
Conservative treatment, Medical treatment, Non-operative, Operative

Unfortunately, none of these methods have proved to be the final solution for the

problem. This is the reason that several efforts towards this have been going on all over the world to find out a suitable answer. Similarly, much work has already been carried out in most of the institutions all over the country.

According to modern the Urolithiasis is classified on the basis of their chemical composition as calcium oxalate, uric acid, phosphate Etc. The crystals of stone are seen under microscope.

If we compare the *Doshaj* types of *Mutrashmari* with the modern types of urolithiasis, then it will be useful for diagnostic purpose and management of urolithiasis.

AIM AND OBJECTIVES

- **AIM:** To study the aetiopathogenesis of *Mutrashmari* w.s.r to Urolithiasis.
- **OBJECTIVES**
 - To study the aetiopathogenesis of *Mutrashmari*.
 - To study the aetiopathogenesis of Urolithiasis.
 - To study the importance of *Pathya* in *Mutrashmari*.

REVIEW OF LITERATURE-AYURVED MUTRASHMARI

Ayurveda the ancient science of life is one of the prides of India. It has dealt with many dreaded diseases under the heading of *Mutrakricchra*, *Mutraghata*, *Mutrashmari* etc. *Mutrashmari* is one of the most common and distressing maladies among the group of urinary disorders. In *TrimarmiyadhayaCharak* place the *Ashmari* in *Mutrakruchha*.

Etymology: -"Ashmanam Rati Dadatiit-iAshmari" means the formation and presentation of a substance like stone.

- "Ashma" means "stone"

- "Rati" means "to present"

Description of Disease W.S.R. to *Nidana - Panchaka*

a) *Nidan*^[1]

According to *Sushruta*, those who neglect the *Samshodhana* of internal channels and those who are engaged in unwholesome dietary habits become the victim of *Ashmari*.

In all types of *Mutrashmari Kaphaprakopa* is the important cause i.e. *Samavayi Karana*. According to *Sushruta* in children all *KaphaprakopakHetu* are presents i.e. *Divaswap*, *Samashana*, *Adhyashana*, *ShitaAhara*, *SnigdhaAhara*, *Madhurahara*.

According to *Vagbhata*, the *Nidanas* are Intake of heavy, fatty & sweet food excessively, Day sleep and *Ajeerna-Bhojana*.

According to *Kashyapa*, the *Nidanas* are *Bhar Vahana* on *Kati* and *Skandha*.

b) *Samprapti*^[2]

Samprapti can be defined as, it is the process which starts from '*Sanchayavastha*' of *Doshas* to the '*VyadhiVayktavastha*'. It is possible through *Samprapti* to assess the *Doshas*, *Dushyas*, *Srotodusti* or *Khavaigunya*, *Agni* etc. It is also helpful because proper treatment is only fruitful if it is applied according to *Samprapti* of disease. As said '*Samprapti Vighatanaamaeva Chikitsa*'.

Because of *Apathya Ahara* and *Vihar*, it causes *Shleshma Dushti*. The vitiated *Shleshma* mixes with *Mutra* attaining shape of gravel thus, manifesting *Ashmari*

Sushruta's examples for clear understanding of the mechanism of stone formation: -

Purvarupa^[3]

BastiPida, *Aruchi*, *Mutrakricchra*, *Bas-tisirovedan*, *MushkaVedana* ,

ShephaVedana, Jwara, Avasada, Basti-gandhatwa, Sandra Mutra, Avila Mutra.

Rupa^[4]

According to *Acharya Sushruta*

NabhiVedana, BastiVedana, SevaniVedana, MehanaVedana, Mutra Dhara Sanga, Mutra Vikirana, GomedaPrakasha, Atyavilam, Sasik-tam, Dhavan, Plavan, Vishirna Dhar, Sarudhira Mutra, Mutrarodha, Atimutraram, Pratatamroditi, Kasamana.

Sadhyasadhyata

In children because of the smaller space occupying lesion and less fat in subcutaneous and perinephric region the prognosis is better.

Similarly, early detected *Ashmari* can be treated with medicines because of its recent origin and small size, while an *Ashmari* of long time origin is difficult to cure and large *Ashmari* is also an indication for surgical treatment. *Ashmari* associated with complications and *Arishta Lakshanas* should be avoided.

No particular *upadrav^[5]* of *Ashmari* are mentioned in Ayurvedic classics except *Mutra sharkara*, described by *Acharya Sushruta*. It is nothing but the disintegrated particles of *Ashmari*, passes along with the stream of urine.

MODERN REVIEW- UROLITHIASIS^[6]

Urolithiasis means the presence of stone/ calculus in the urinary system. The most common were the bladder stones of young boys in the Western world composed chiefly of ammonium acid and calcium oxalate. Lithiasis occurs in various forms and at various sites in the body. Most common sites are urinary tract and biliary tract.

As stone is a recurring disease so, knowledge about the composition of stone is

also important as preventive measure are based on such information.

Hippocrates the father of modern medicine described the clinical features and management of stone in 460-370 B.C. and had done a study on heredity, race, climate, diet, drinking water and faulty metabolism.

Factors for stone formation

Vitamin A deficiency, Less Water intake, Inadequate urinary drainage, Hyperparathyroidism, Stasis, Infection etc.

Types of Stone

1. Primary stones

Those stones which arise in apparently healthy urinary tract and are composed of substances either present in normal urine or derived from metabolic disorders are primary stones. They are aseptic and arise in acidic urine and require no performed nuclei. Usually they are calcium oxalate and rarely uric acid, cystine and xanthine.

2. Secondary Stones

This type of stone occurs in the presence of pre-existing disease of the urinary tract and their formation requires a performed nucleus of a primary stone, a foreign body or a malignant tumor. These stones are infective in origin and usually occur in alkaline urine and are composed of ammonium, magnesium phosphate or calcium phosphate.

On the basis of size: -

- 1. Small stones:** -All the small stones come under this category. They usually pass through or become impacted in ureter and damage the epithelium, leading to hematuria, then fibrosis and finally stricture.
- 2. Large stones: - (Staghorn Calculi):** - Mostly they are the phosphate calculi. Here one large stone may fill the renal cal-

uces and pelvis, and can cause stagnation of urine, predisposing to infection and kidney tumors. It may cause irreversible kidney damage.

- 3. Oxalate Stones:** -These stones usually arise in the pelvis or calices and are liable to expel out down to ureter. These accounts 60 to 70% of total calculi. These are hard, nodular like mulberries (also called mulberry calculi), covered with sharp projections and the modified blood is precipitated on the surface of stone and giving a dark colour to the stone. Calcium oxalate stones occur more frequently in men than in women.

Pathogenesis

The mechanism of calcium stone formation is explained on the basis of imbalance between the degree of supersaturation of the ions forming the stone and the concentration of inhibitors in the urine. Most likely site where the crystals of calcium oxalate and/ or calcium phosphate are precipitated is the tubular lining or around some fragment of debris in the tubule acting as nidus of the stone.

Clinical Features

Pain: - Most of the patients with renal stone experience discomfort or a dull pain in the renal region. Generally, it occurs during the night or in early morning hours and usually effects the patients while at rest and may aggravate by exercise, manual labour and any physical activity. Continuous moving calculi create more amount of colic. Renal colic often has an acute onset without premonitory symptoms. The pain is usually confined to the renal region, particularly in renal angles (angle be-

tween 12th rib and lateral border of erector spinae muscle) and generally radiates along the ureter. In men, it may refer to testicle and make them tender.

Fever: It is another presenting symptom but only happens in presence of urinary infection along with the calculus.

Hematuria: - Profuse or microscopic hematuria occurs in patients with renal calculi or after an attack of pain. This may occur due to the injury to the urinary system by their projecting part at the time of movements.

Pyuria: - In case of prolonged infection pus is found in the urine in varying amount. Stone leads to an increase in the number of white cells in the urine even in absence of infection.

The other symptoms: -

- * Increased pulse rate at the time of pain
- * Nausea and vomiting
- * Profuse sweating
- * Subnormal temperature

Investigations

CBC, ESR, Sr. Urea, Creatinine, USG, X Ray KUB, Intravenous Urography, Retrograde Pyelography, cystoscopy, CT Scan, Radio isotope Method.

Importance Of Pathya^[7]

There is a high importance of *Pathya* in *Mutrashmari*- Urolithiasis. As there is disturbance in the normal functioning of Parathyroid gland, there is increased excretion of calcium resulting in calculus formation. So, one should avoid the calcium rich diet such as milk, curd, paneer, soyabean, protein rich diet such as non-veg, vegetables such as tomatoes, *palak*, cabbage etc. *Ativyayam* (Excessive ex-

ercise), suppression of micturition, ejaculation, incompatible constipation and heavy diets.

One should follow *Pathya* such as consumption of *Tulsi Swarasa*, oranges, pineapple, papaya, grapes, Honey, *Yava*, *Kulatha*, *Puranashali*, *Mudga*, *Ginger*, *YavaksharaGokshura*, *Yavakshara*, *Varuna*, *Punarnava*, *Pashanabheda*.

CONCLUSION

Mutrashmari which is the rising disease in India, occurs mostly in the age group 20 to 40, occupation servicemen group, males are more prone to *Mutrashmari* than females, persons which are consuming regularly and excessive non-veg food, suppressing the natural urges, sedentary workers. The persons who are drinking bore/ well water, Persons suffering from hyper parathyroidism, drinking less water etc. Because of the causative factors, aetiopathogenesis occur manifesting *Mutrashmari*- Urolithiasis. Thus, it presents symptoms such as radiating pain from lumbar region to front, burning micturation, nausea, vomiting etc.

So, the best treatment in the disease *Mutrashmari* is following *Pathya* such as drinking high quantity of water, consumption of papaya, oranges etc. and avoiding causative factors such as consumption calcium rich diet etc.

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