

Critical Appraisal on Mutrashmari a troublesome disorder & its Ayurvedic view of management.

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Abstract: Mutra means Urine and Ashmari means a structure resembling stone. In Charaka Samhita, Susruta Samhitha, and other ancient books, the etiopathogenesis, clinical characteristics, kind, and prognosis of Ashmari are thoroughly described. The exacerbated Kapha dosha enters the urinary system and dries up to produce the calculus as a result of the causative causes imbalance and Ahara Vihara (unwholesome diet and living practices). According to Acharya Vagbhata, resisting the urge to urinate causes crystallization, which then leads to the creation of calculi. There are a variety of causes that contribute to the production of mutrashmari, including a poor lifestyle, lack of sleep, strange diets, frequent fast-food meals, preserved foods, vitamin A deficiency, use of antacid medications, and peculiar eating habits. thyroid disorder, consumption of a specific food item in excess, long-term catheter use, gastric surgery, Obesity, disease of the kidneys. Mutrashmari is also a result of geographical factors. The prevalence is thought to be between 0.5 and 1% globally, and it is higher in industrialized countries (2–13%) than in developing ones (0.5–1%). About 10% of men and 5% of women will develop symptomatic urolithiasis throughout their lifetime. According to Ayurvedic scriptures, urolithiasis and mutrashmari can have a mutual relationship. Apathya, or pathya, plays a significant role in Mutrashmari. Both shaman and shodhan chikitsa are described as treatments for mutrashmari in Ayurveda. Before deciding to undergo surgery, Acharya Sushrut recommended using shaman chikitsa such ghrita (medicated ghee), taila (medicated oil), paneeya kshara, etc. that have properties like chedana, bhedana, lekhana, and mutala.

Keywords: Mutrashmari, Apathya, pathya, Basti, Pashanbhed

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Introduction:

been described in the science of life and an Atharvaveda upanga. The knowledgeable ayurveda acharyas have provided detailed descriptions of a variety of bodily systems with regard to their anatomy, physiology, pathology, etc. One of these, the Mutravaha samsthana (urinary system), is used for the production and elimination of mutra. They included embryology, etymology, and other details while describing the anatomy and physiology of the urinary organs.

1. BASTI:**Etymology**¹

After the suffix "Tich" was added, the word "Basti" was created from the root "Vas". According to Shabdakosha, the word "VAS Acchadane" is derived from the root "Vas". It can be used to cover, base, storehouse, or reservoir, among other things.

Synonyms²

There are many synonyms like, Mutrashaya, Mutrabasti, Mutradhara, Mutraputa and Mutraputaka.

Definition: In Ayurvedic texts though no clear-cut definition of Basti has been given, even then from the grammatical derivations, it can be defined as a store house which acts as a reservoir of urine.

Embryological development:

According to the fundamental principles of Ayurveda the human body is constituted on the basis of the Five Mahabhutas and the Tridosha at the time of combination of Shukra and Shonita. These eight factors are responsible for the production of each and every organ during the foetal life.

Basti: - The Basti is a hollow structure made by the Vayu entering in the combination of essence of Rakta, Kapha and Pitta. It has been said by all the Acharyas that Basti is derived from Matrija Bhava- the maternal constituents³.

Situation: Basti has been accepted one among the Kosthangas by all the Acharyas Sushruta states that Basti is surrounded by Nabhi, Kati, Muska, Guda, Vakshanas and Sepha.⁴

Structure: The Basti is Alabu shaped and is fixed on all sides by Siras and Sanayus according to Sushruta. He further adds that Basti is thin walled and has a single out let directed downwards⁵. Vagbhatta has mentioned the shape of Basti as Dhanurvakra i.e., a curve like a bow with a downward opening. Basti has been counted as one of the vital parts i.e., Marmas of the body. It is of the Snayu Marmas type with area of four fingers⁶.

2. VRIKKA**Synonyms**⁷: -

1. Vikka
2. Vrikka

It is derived from the root "Vikkadane" means to take. No direct reference of Vrikka's relation to urine formation is found in either of the Ayurvedic classics. Vrikka are two in numbers and are situated in the lumbar regions on either side in the posterior abdominal wall in Kostha. Dalhana) Like Basti Vrikka is also a maternal contribution derived from essence of Rakta and Meda. So far as the function is concerned, Sarangdhara has considered the Vrikka's as the nourishers of the abdominal fats.

3. GAVINI:⁸

They are two in number, situated one on each side of Basti, receiving Mutra from the antras and sending it further to the Mutrashaya

4. MUTRAPRASEKA⁹**Synonyms:** -

1. Mutrapatha
2. Mutramarga
3. Mutrasrota

It is one among the eight important organs, which are to be protected from any injury at the time of performing surgery for Mutrashmari. It is the

outlet of the Basti, which is two Angulas in females and Twelve Angulas in males. In male it carries both Mutra and Shukra, while in female only Mutra.

5. MUTRAVAHA SROTAS¹⁰

According to Charaka, the definition of the word Srotas is 'Sravanat Srotamsi' which means, where from something oozes out. On this way the channels which carry Mutra can be considered as Mutravaha Srotas. He says that Mutravaha Srotas has its origin from Basti and two Vankshanas. Whereas Sushruta believes Basti and Medhra as the roots of Mutravaha Srotas. Any trauma to this Mutravaha Srotamsi leads to acute retention of urine, distension of urinary bladder and painful erection of the penis, ultimately leading to death of the patients.

6. MUTRAVAHA NADIS¹¹

Sushruta in chapter third Nidanasthana says that these are thousand in number and are situated in between Pakvashaya and Basti and their main function is to carry the Mutra from Pakvashaya to Basti, like the rivers fill the ocean with water. Acharya Vagbhatta is also having the same opinion.

7. MUTRAVAHA DHAMANIS¹²

Sushruta while describing the Dhamanis has narrated one variety of Dhamani, termed as 'Adhogami Dhamani' which are meant for Sara-Kitta Vibhajana and to transport Mutra, Purisha Sukra, Artava, Apana Vata etc. downwards. These same Dhamanis taking part in the Sarakitta vibhajana process, out of which two are said to be the Mutravaha Dhamanis going to the Mutrabasti, the functions of which stated are Dharana and Yapan of Mutra and Basti. Dalhan further says that these are further divided into countless branches.

AIM AND OBJECTIVES:

1) To study the concept of "Mutrashmari".

2) To study management of "Mutrashmari" as modern and Ayurveda.

METHODOLOGY:

Materials and methods:

A detailed review of the available literature on *Mutrashmari*, in classical texts such as, *Sushruta samhita*, *Charaka samhita*, *Ashtanga hridaya*, *Ashtanga samgraha* was done. The data was also collected from text books of contemporary science and papers published in different national and international journals.

Charak Samhita, *Sushruta Samhita*, *Chakrapani*, other Ayurvedic texts, modern textbooks, journals and online databases were reviewed thoroughly for the study material.

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. Acharya sushruta, the pioneer in the art and science of surgery has described widely and comprehensively about the mutrashmari with its classification, symptomatology, etiology, pathology, complications and its management. This is the proof for the depth of knowledge of the acharyas on the subject of urinary disorders as a whole.

Etymology: - "Ashmanam Rati Dadati iti Ashmari" means the formation and presentation of a substance like stone.

- "Ashma" means "stone"

- "Rati" means "to present"

Definition: No satisfactory definition of the Ashmari is available in either of the Ayurvedic texts, still it can be defined as below: -

1. "Ashmari Mutra Krichhra Syat " (Amarakosha)
2. "Ashmari Mutra Krichhra bheda" (Ayu. Shabdhakosha)
3. Ashmari - Stone, gravel, strangury (M. Williams)

Description of Disease W.S.R. to Nidana Panchaka:

A) NIDANA: ¹⁴

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.

Acharya Charaka has not given separate chapter for the disease but explained it under the "Mutrakricchra". Hence the nidanas of both Mutrakricchra & Ashmari can be taken as same. They are: -

- Practice of excessive exercise
- Strong medicines
- Ruksha Madyapana
- Excessive intake of anupa - mamsa
- Adhyashana
- Ajeerna-bhojana
- Matsya sevana

According to Vagbhata, the Nidanas are

Intake of heavy, fatty & sweet food excessively.

Day sleep

Ajeerna-bhojana

Adhyashana

According to Kashyapa

Bhar vahana on Kati and Skandha-

B) SAMPRAPTI

Samprapti can be defined as, it is the process which starts from 'Sanchayavastha' of Doshas to the 'Vyadhi Vayktavastha'. 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 Vighatanama eva Chikitsa'. Different views have been put forth regarding the Samprapti which are as below: -

Sushruta's View : ¹⁵

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

A new pitcher filled with clear water can also show settling down of muddy particles in due course of time. In the same way the calculi are formed in Basti. As air & fire of electricity in the sky consolidate water (to form hail storms) similarly Pitta located in the bladder, along with Vayu consolidates Kapha to form calculi.

Charaka :Charaka explained the process of formation of Ashmari as similar to that of Gorochana (Gall stone) in the Pittashaya of cows. Both Kashyapa and Vagbhata accept the views of Charaka and further state that the increase or decrease in the Medodhatu is directly related to the size of Ashmari.

Disease Process According to Shatkriyakala: ¹⁶

Acharya Sushruta has very well mentioned the six stages of disease, which are called 'Shatkriya Kala' which gives the full idea of Samprapti of the disease and helpful in the diagnosis and treatment. Sushruta has given more stress towards these and further says that the exact knowledge of these stages is the only path to reach upto disease or treatment. In reference to the production of the disease Mutrashmari, following six stages are the proper time for the treatment: -

1. Sanchaya

It is the stage when Doshas accumulate in their Ashayas more than the normal range due to various etiological factors and in case of Ashmari these excess accumulated Doshas develop the following symptoms: -

1. Discomfort in hypogastrium
2. Anorexia
3. Pyrexial feeling
4. General debility
5. Stiffness and fullness of abdomen
6. Yellowish tinge of the skin
7. Concentrated urine etc.

Acharya Sushruta says that the treatment should start as soon as the symptoms of first Kriyakala i.e., Sanchaya develops, for the prevention of future disease¹⁷.

2. Prakopa

It occurs when Sanchyavastha is neglected or proper corrective steps are not taken. In this stage the vitiating factors instigate the Doshas further to get irritate and undergo a suffering condition. This stage is called the Prakopavastha. The following are the symptoms to a patient likely to suffer from Ashmari.

All symtoms of Sanchyavastha with more prominence and in addition to them are: -

- Pain over the bladder region, anal region and testicular region.
- Painful micturition with thickness
- Thirst
- Nausea etc.

3. Prasara

Prasara avastha is a progressive stage of Prakopa avastha. In this stage the melted Doshas overflow and move all over the body after leaving their Ashaya under the influence of Vayu in search of weak spot in the body for their restraint. Following symptoms develop in this stage:

- Anaha
- Atopa
- Daha
- Burning micturition.
- Anorexia etc.

But the patient who suffer from Ashmari will complain of

- Frequent pain over the bladder area
- Dysuria
- Pain in the testicles along with previous symptoms.

4. Sthanasanshraya

This stage is also known as Dosha Dushya Sammurchhana, where there is duel between the Doshas and Dushyas. In the stage the previously irritative and disseminated Dosha may finally settle down at a place where they find maximum favourable place (Khavaigunya).

The following symptoms develop to a patient who is going to suffer from Ashmari :-

- Fever
- Pain in the bladder region
- Dysuria
- Pain in the region of the bladder neck the scrotum & the penis.
- Goat like smell in urine
- Distaste of food etc.

5. Vyakti

Vyakti is the fifth stage and here the disease comes out with clear picture. In this stage the disease can easily be identified, where one can do the proper diagnose and treatment, hence called the Rupa Avastha. Following are the symptoms which patient feels at this stage: -

- Excruciating pain in umblical region during micturition
- Pain in bladder, perineal raphe & penis
- Obstruction to the flow of urine
- Haematuria
- Turbid and sandy urine with a shining like Gomedam gem.

6. Bheda

Bheda Avastha is that condition where the disease takes one of the two natural courses either spontaneous subsiding or leading into chronicity. This is the last stage of management and it is suggestive stage for the complications and the prognosis of the disease. In case of spontaneous recovery, the patient of Ashmari experiences gradual relief of all the symptoms and improvement in general health. If the disease leads to chronicity, then the patient complains

of obstruction of the urinary outflow with a complication involving the upper urinary system due to backward pressure i.e., involving the ureter and kidneys.

C) PURVARUPA

The signs & symptoms which are indicative of a future disease are known as Purvarupa. Purvarupa play a very important role in the diagnosis and treatment of any disorder. It is a stage where the disease is reversible with very little residual damage.

Different classics have mentioned about the prodromal signs and symptoms of Ashmari viz.

Lakshanas of Different Ashmari ¹⁸

1. Shleshmaja: -

- Dysuria
- Heavy & cold sensation in bladder area.
- Cutting, incising, pricking pain.

2. Pittaja: -

Burning hot sensation and inflammatory changes in urinary tract.

3. Vataja: -

- Severe bladder pain, umbilical pain and pain in the anus
- Frequent passage of flatus
- Urethral burning
- Dysuria
- Difficulty in defecation.

4. Shukraja: -

- Dysuria
- Scrotal swelling
- Lower abdominal pain.
- Special characteristic feature is, it can be crushed into powder by pressure.

Features of Ashmari : ¹⁹

1. Shleshmaja: -

- White, slimy, big like Kukkutanda
- Colour - Madhuka Pushpavat
- Heavy in weight

2. Pittaja: -

Reddish / Yellowish - black or honey like in colour.

Resembles Bhallataka seed.

3. Vataja: -

- Dusty coloured
- Hard
- Irregular
- Rough
- Nodular like Kadambapushpa

SADHYASADHYATA:²⁰

The 'Ashta Mahagadas' are detailed by Acharyas in our classical literature; these Mahagadas are difficult to treat and have poor prognoses. Given that Ashmari is one of them, treating it will require a lot of care. The prognosis is better in children because to the smaller space-occupying lesion and less fat in the subcutaneous and perinephric area. Similar to this, an early-detected Ashmari can be treated medically due to its recent origin and small size, however an Ashmari with a lengthy history of development is difficult to treat and huge Ashmari may require surgical intervention. Avoid Ashmari and Arishta Lakshanas, which are linked to problems.

Upadrava: No particular Upadravas 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.

Lakshanas of Upadrava ²¹

- Pain in the pericardium
- Weakness of lower limbs
- Pain in the flanks and shivering
- Thirst
- Blackish discoloration of body
- Dislike for food and indigestion
- Pale appearance of the body etc.

Chikitsa:

Mainly two types of Chikitsa are described in our Shastras for every disease viz.

i. Samanya Chikitsa (General)

ii. Vishesha Chikitsa (Specific)

In this case, the Vishesh Chikitsa is recommended after learning about the type of ailment, Doshas involved, condition of Dhatus, etc. The Samanya Chikitsa is more supportive and only partially relieves the symptoms of the illness. The primary strategy for keeping oneself healthy is "Nidana - Parivarjana." Given that Ashmari has a kapha-predominant dosha, it is best to avoid taking any actions that would aggravate kapha and stick to treatments that will help manage it.

The below said is the treatment of choice in Ashmari viz.

1. Aushadhi - Chikitsa

Aushadha used by sushruta for different types of Ashmari:

Vataja	Pittaja	Kaphaja
Pashanbheda	Kusha	Varunadi-Gana
Vasuka (Shweta Ark)	Kasha	Gugglu
Vasir (Gajpippal)	Ikshumool	Elaychi
Ashmantak (Changeri)	Pashanbheda	Kutha
Satavari	Satavari	Devdaru
Gokharu	Vidarikanda	Haridra
Brihati	Varahikanda	Maricha
Kantakari	Root of shali Dhanya	Chitraka
Kapotavanka (Brahmi)	Dhanya	
Khasa	Gokharu	
Gunja	Shayonak	
Shayonak	Patala	
Varuna	Patha	
Yava		
Kulatha		
Bera		
Nirmali		

Pathyapathya:

Pathya in simple meaning is, that Ahara & Vihara which is always suitable to patient and aids in relief or cure of a disease without initiating other diseases. And those Ahara and Vihara, which cause complications and aggravate the same disease is known as Apathya. No Pathyapathya has been directly mentioned by Acharya Sushruta in relation to Ashmari but Charaka Samhita, Harita Samhita, Bhaishajya Ratnavali have mentioned about it for Ashmari.

2. Basti Karama - Chikitsa

3. Kshara - Chikitsa

4. Shastra - Chikitsa

But in the present work Aushadha Chikitsa has been taken for the study.

Aushadha Chikitsa:

Because Ashmari has been considered a grave disease and said to be as fatal as death. So, it is necessary to diagnose and treat the disease at the earliest. Acharya sushruta has advised to treat the disease in the Purvarupa stage itself. He has prescribed following medications depending upon the varieties of Ashmari.

PATHYA: Basti, Vamana, Virechana, Langhana, Avagaha sweda are useful in case of Mutrashmari.

Dietetic items advocated are : Yava, Kulatha, Puranashali, Mudgha, Ginger, Yavakshara and all the Vatanashaka Ahara.

Medicines Advocated are : Gokshura, Yavakshara, Varuna, Punarnava and Pashanabheda.

APATHYA: Ativyayam (Excessive exercise), suppression of micturition, ejaculation, incompatible constipation and heavy diets.

Dietetic items non advocated are: Shushka Ahara, Kapitha, Jamun, dry Dates, Kshaya Ras Sevana etc.

OBSERVATIONS:

The only classical work among the Brihatrayi is the Sushruta Samhita, which distinguished Mutrashmari as a distinct illness entity. Other literature such as Madhavanidana, Bhavaprakasha, Bhaishajya Ratnavali, and Yogaratanakara have explained it as a different sickness. Charaka Samhita classified it as Mutrakrichra and Ashtanga hridaya was included in Mutraghata. Asamshodhana Sheelata and Apathya Sevan were listed in the Sushruta Samhita as the Nidana for the creation of Mutrashmari. In the creation of Mutrashmari, Sheeta, Snigdha, Guru, Madhura ahara, and Diwaswapna are also referred to as Nidana. Mutravegarodha was listed as one of the Nidana in the Ashtanga Hridayakara. Mutrashmari was listed as a type of Mutrakrichra by Charaka Samhita, and it was given the name Mutrashmarijanya Mutrakrichra. Hence, Samanya Nidana mentioned for Mutrakrichra is considered as Nidana of Mutrashmari which includes, Teekshna aushadha sevana, Rooksha madyapana, Anooa matsya sevana, Adhayashana, Ajeerna bhojana, Ativyayama, Ashwayana and Prasanga. In the context of Mutrashmari, the general Mutravaha Srotodusti Nidana described in the Charaka Samhita is equally pertinent. It comprises drinking fluids, eating, performing coitus when the urge to urinate arises, holding back pee when the urge arises, and injuring Mutravaha Srotas externally. Emaciated people are more susceptible to etiological variables from the Charaka Samhita, such as Mutravaha sroto dushti, Madhava nidana, Yoga Ratnakara, Gadanigraha, and Bhavaprakasha. Another important source of knowledge on the causes of Mutrashmari is the Hareeta Samhita, where the author lists Pitru

matruka Dosha and Mutra vegavarodha as Nidana for Mutrashmari. For Shukrashmari, Maithuna Vighata and Ati Maithuna are regarded as Nidana. According to modern science, infections, dietary variables, a hot environment, immobility, metabolic causes including hyperparathyroidism, reduced urinary citrate, and genetic factors are all involved in the development of urolithiasis. other systemic illnesses, including hypertension, diabetes mellitus, and crohn's disease.

DISCUSSION:

Ayurveda offers a wide range of Mutrashmari modalities, including Nidanprivarjana Sanshodhan, Sanshaman, and Shastra Karma, that not only heal disease but also have the potential to prevent it. The pathophysiology of Ashmari is primarily caused by the kapha dosha. Numerous past studies have demonstrated that the etiological elements that cause Mutrashmari's manifestation can be avoided in order to control the development of Mutrashmari.

Analysis of Ashmari nidana with available research references:

“Asamshodhana sheelasya apathyakarinah” quoted in Sushruta samhita can be interpreted in two ways,

1. Indulgence in apathya ahara vihara by the person who is not undergoing proper shodhana,
2. Asamshodhana and apathya sevana as separate entities.

The term Asamshodhana sheelata can be understood as follows:

- Nonperformance of Shodhana karma in whom it is indicated,
- Panchakarma apachara in terms of Heena yoga

Mutrashthila or BPH results in urine stasis, which further leads to infection and ultimately results in khavaigunya. When there is a restriction in the free flow of urine, stones are more likely to form. Additionally, it makes urine more

alkaline and promotes the precipitation of crystalloids, which aids in the development of kidney stones.

CONCLUSION:

Urolithiasis incidence is rising globally despite significant advancements in the creation of novel medicines for the management of urinary stones. To stop Mutrashmari from happening, it's critical to have a thorough awareness of the etiological elements (Nidan). The Ayurvedic medical and lifestyle system describes a number of techniques to avoid Mutrashmari. Urolithiasis (Mtrmar) is mostly caused by calcium deposition, which may be related to citrate deficiency and other etiological causes. Along with acting as Doshahetu, several nidana, including Mutravegadharana and diseases like Mutrakrichra and Mutrashtila, also function as vyadhi hetu. In Mutravahasrotas, the cause of khavaigunya is Pitrumatruka Dosha.

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