

MANAGEMENT OF ASHMARI (RENAL CALCULI) THROUGH AYURVEDA: A CASE STUDY

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ABSTRACT

In the present-day context, *Ashmari* (renal stone) is not a newly discovered disease. Ayurveda has already detailed it, including the pathogenesis, symptoms, kinds, palliative care, and surgical options. Minerals and salt combine to form kidney stones. It affects one in ten persons on the planet. In Ayurveda, kidney stones are similar to *Ashmari*. 'Ashm' has the connotation of a stone, while 'Ari' denotes opponent. Medication for pain, antispasmodics, antivomitics, and fluids are the treatments for kidney stones. Small renal calculi are easier to pass through the urine when properly hydrated. The surgical procedure known as lithotripsy is used on patients who have kidney stones that reoccur. Still, there is a potential of surgical complications. The patient in this case study, a 48-year-old woman, having burning micturition, nausea, vomiting, and abdominal discomfort that primarily radiates to the groin area. The clinical diagnosis showed kidney stone. Patient was suggested lithotripsy but declined to carry it out. thus spend two months receiving Ayurvedic treatment. Symptoms and the

USG investigation greatly alleviated the patient. With the use of efficient Ayurvedic treatments, this case study aims to examine *Ashmari* (Kidney Stone) from both Modern and Ayurvedic perspectives, as well as safe and effective Ayurvedic medicine that doesn't involve surgery.

KEYWORDS: Ayurveda, Kidney stone, Lithotripsy, *Ashmari*.

INTRODUCTION

Nephrolithiasis is the third most common urinary tract disorder, behind urinary tract infection and prostatic hyperplasia. Over an individual's lifetime, the worldwide prevalence of stone formation ranges from 10% to 25%. The age group at which this syndrome is most prevalent is between 20 and 30 years, and summer time is when it is most frequently seen in guys who are overweight and have a high body mass index (BMI). At the end of the first year, it is noted that the incidence of recurrence is 15%; however, after five years, it rises to 30–40%, and after ten years, it approaches 50%.^[1] According to Ayurveda, Nephrolithiasis or Urolithiasis can be related to *Vrukka Ashmari* or *Mutrashmari*, which are categorized as one of the *Astamahagada*, and are challenging to cure diseases.^[2] The etiopathogenesis, clinical features, kind, and prognosis of *Ashmari* are in-depthly explained in *Sushruta Samhita*.^[3] According to *Acharya Sushruta*, the four different calculi types—*Kapha (shleshma)*, *Pitta*, *Vata* and *Shukrajashmari*—are categorized into distinct groups based on how they relate to the three bodily doshas. The symptoms of *Vattaj Ashmari* are similar to those of a Calcium Oxalate type stone, *Pittaj Ashmari* symptoms are similar to those of a Uric Acid type stone, and *Kaphaj Ashmari* symptoms are similar to those of a Phosphate type stone. *Ashmari* mostly involves *Kaphaj Pradhyanya Dosh*.

1) *Kaphaj ashmari* (Phosphatic calculus)

It has the appearance of *mahu* color and is large, slimy, and white. Pain in the *basti* area and *shaitya* are symptoms. The world's first surgeon, *Acharya Susruta*, wrote about several *Ashmari* treatments, including *Ghrit*, *Kashay*, *Kshara*, specifically stated that we should attempt this *shaman* treatment before having surgery.^[4]

2) *Pittaj Ashmari* (Uric Acid calculus)

Pittaj Ashmari resembles the color of honey or *bhallatak asthi* in shades of red, yellow, and black. Yellow urine and burning micturition are symptoms of this *Ashmari*.^[5]

3) *Vataj ashmari* (Oxalate of lime calculus)

Vataj Ashmari has a rough, uneven, blackish structure with spikes all around it, similar to a *Kadamb* flower. Severe pain in the belly and gud (anal) region are the symptoms. Penis burning, difficulty eliminating *Vata*, *Mutra*, and *Mala* (stool) are also present.^[6]

4) *Shukrashmari* (Seminal/Spermatic concretions, Spermolith)

In this *Ashmari* there is pain during micturation, Pain and inflammation in the belly and on applying pressure the calculi gets rapt in the area.^[7]

CASE REPORT

A 45 year old, female patient, who was completely well before 15 days, then she noticed sudden onset of severe pain in the abdomen early in the evening around 6 o'clock. She complained of acute pain in the right side of the flank region that radiates from loin to groin region and refer from the backside to the frontside, continuous dull ache pain, dysuria, burning sensation during urination, mild tenderness was present. Also, mild difficulty on forcible urination associated with vomiting, indigestion, weakness, constipation and fever with chills. She consulted a nearby physician and got temporary relief from those complaints. Later she observed that pain in abdomen and dysuria were persisting since few days. She was advised whole abdomen Ultrasonography (USG) and the findings showed Bilateral Ureteric calculus. Then she approached to Swasthavritta OPD of Dr. D.Y.Patil College of Ayurveda and Research Centre for the treatment.

History of past illness

No any medical, surgical and psychiatric diseases.

Family history

Nonsignificant.

Mental state examination

The patient was normal and cooperative.

Clinical examination

Built- Ectomorph

Height- 161 cm

Weight- 53 kg

Pulse – 86/ min

B.P – 110/70 mm of Hg

RR – 18/min

Astavidha Pariksha (eight-fold examination)

Nadi (pulse) - 86 beats/min

Mala (stool) - *Asamyaka* (constipated, 1 time a day, unsatisfactory bowel habit)

Mutra (urine) - *Bastivedana* (painfull Micturation), *Mutrakricchra* (difficulty while urination), *Sarudhiramutrata* (occasionally hematuria), *Mutradaha* (burning micturition)

Jeevha (tongue) - *Saam*(coated)

Shabda (speech) – *Spashta* (clear)

Sparsha (skin) – *Ushana* (hot)

Druka (eyes) - *Prakruta* (no pallor and no Icterus)

Akruti (body structure) – *Heena* (thin with low body weight).

Dashavidha Parikshya Bhava

Prakriti- *Vata kaphaj*

Vikruti- *Vata kaphaj*

Sara- *Mamsa sara*

Samhanana- *Madhyama*

Pramana- *Madhyama*

Satmya- *Madhyama*

Satva- *Madhyama*

Aahara shakti- *Madhyama*

Vyayama shakti- *Madhyama*

Vaya- *Madhyamavastha*

Nidanapanchak

Hetu (etiology or causative factors)- *ruksha and alpa aahar vihar* (dry food), *ratrijagaran* (awakening late at night), *Alpa ambupana pana* (insufficient water intake), *Vegadharana* (suppression of natural urges) and *sedentary lifestyle*.

Purvaroop (prodromal symptoms) - abdominal distension, *Mutra daha* (burning micturition).

Roopa (manifestation) – *Sarujamutrpravritti* (pain while urination), abdominal pain and burning micturition.

Samprapti (patho-physiology of the disease) - caused by circumstances that vitiated the *Vata* and *Kapha doshas* in the *Mutravaha strotas*, resulting in the production of *Ashmari*. *Ashmari's Samavayi karana* corresponds to *kapha dosha*. The dominant *dosha*, *Kapha*, becomes hard and manifests as *Ashmari*. *Apana vayudushti* prevents the body from fully excreting *Mala* (toxic particles), which results in a decrease in urine volume due to the saturation of the *Kapha dosha*. This accumulation of *Mala* in the body causes the onset of sickness. *Ashmari* was the *Vyaktavastha* (diagnosis).

ASSESSMENT OF PATIENT

The assesment of patient was done by the improvement in the gradings of subjective parameters and objective parameters.

I. SUBJECTIVE PARAMETER

Table no. 1

1. Pain		Grade
	No pain	0
	Occasional pain but didn't required treatment	1
	Occasional pain but required treatment	2
	Continuous pain, required treatment	3
2. Dysuria		
	No dysuria	0
	Occasional dysuria	1
	Occasional dysuria that require treatment	2
	Constant dysuria that require treatment	3
3. Burning micturation		
	No burning micturation	0
	Occasional burning but clear urine	1
	Occasional burning micturation, mild pain after displacement, require treatment	2
	Constant dysuria that require treatment	3
4. Tenderness in renal angle		
	No tenderness	0
	Mild tenderness	1
	Moderate tenderness	2
	Severe tenderness	3

II. OBJECTIVE PARAMETERS

Table no. 2

USG findings of renal calculi, size of calculi	Before treatment and after treatment
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TREATMENT

Table no. 3: Internal medications.

Sr. no.	Medicine	Dose	Time and duration
1.	<i>Chandraprabhavati (Dhootapapeshwar)</i>	250mg BD with lukewarm water	Before food For 30 days
2.	<i>Arogyavardhini vati (Dhootapapeshwar)</i>	250 mg BD with lukewarm water	Before food For 30 days
3.	<i>Sunnishanak beej hima</i>	1 part of sunnishanak beeja + 6 parts of cold water kept overnight and filtered in morning	Empty stomach in morning
4.	<i>Punarnava churna (1gm) + Gokshur churna (1gm) + Varun churna (1gm) + Pashanbheda churna (1gm)</i>	4 gms with 1 tsp of ghee BD	Before food for 30 days

Table no. 4: Type of Chikitsa/Karma done.

Type of Chikitsa / karma	Material	Site	Duration
<i>Viddhakarma</i>	Needle no. 24	At the lateral border of the thumbs of both legs on an alternate day	Once an alternate day (Total 12 sittings)

Follow up and outcome

After the treatment, patient got relief in all symptoms. Also, there was improvement in associated complaints. Relief in pain, burning sensation during urination, no pain during forcible urination, no tenderness was present, vomiting was also digestion was good. During followup period patient informed that after 23 days the calculus was expelled out. No signs of recurrence was noted.

OBSERVATION AND RESULT

Table no. 5: Improvement in Signs and Symptoms.

Complaints	0 day (Before treatment)	7 th day	14 th day	30 th day
Pain	3	2	1	0
Dysuria	2	1	0	0
Burning micturation	3	1	1	0
Tenderness at Renal angle	3	2	1	0

Table no. 6: USG Findings Before and After treatment.

	Before Treatment (15/03/2023)	After Treatment (05/09/2023)
USG Findings	Bilateral non obstructed calculus. Right kidney showed calculus of size 6mm in mid pole. Left kidney showed calculus of size 7 mm in mid pole.	There is no evidence of obvious calculus seen in both kidneys.

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Ref. By: [REDACTED] Date: 15/03/2023

SONOGRAPHY OF ABDOMEN AND PELVIS

- Liver** - Normal in size, shape and echo pattern. No focal lesion. Intrahepatic biliary radicles are normal. Hepatic veins and portal vein are normal. CBD is normal in calibre.
- Gall bladder** - Distended and shows normal wall thickness. No e/o GB calculi.
- Pancreas** - Normal in size and echo pattern.
- Spleen** - Normal in size and shows normal echo pattern.
- Both kidneys** - are normal in size, shape, position and echo pattern. C/M differentiation maintained.
Rt kidney measures 8.96x4.51 cm. E/o calculus of size 6 mm in mid pole.
Lt kidney measures 10.61x4.64 cm. E/o calculus of size 7 mm in mid pole.
Bilateral pelvicalyceal system is normal.
- Urinary bladder** - is distended and shows normal wall thickness.
- Uterus** is not seen h/o post operated.
- Both ovaries** not seen.
No e/o retroperitoneal lymphadenopathy.
Visualised bowel loops appear normal.
No e/o intraperitoneal free fluid.

Impression -

- Bilateral non obstructed renal calculi.

Suggested clinical correlation

[Signature]

MBBS DMRD

Investigations have their limitation. Solitary pathological/Radiological & other investigations never confirm the final diagnosis. They only help in diagnosing the disease in correlation to clinical symptoms & other related tests. Please interpret accordingly.

Fig no. 1: USG report before treatment.

MEDITECH
DIAGNOSTICS AND POLYCLINIC

Name: [REDACTED]	Ref By: [REDACTED]
Age: 45 yrs	Date: 05/09/2023

ULTRASOUND OF ABDOMEN AND PELVIS

CLINICAL PROFILE: Renal calculi on follow up.

LIVER: Normal in size, position, outline and echotexture and measures 12.0 cms in L.A in MCL. There is no intrahepatic biliary dilation noted. No focal lesion seen. The hepatic veins appear normal.

PORTAL VEIN: appears normal and measures 9.4 mm at portal hepatis.

GALL BLADDER: GB is partially distended and reveals normal wall thickness. There is no evidence of any calculus or peri cholecystic collection.

CBD: Not dilated.

PANCREAS: Tail is not well seen due to dense bowel gas. Rest of the parenchyma is normal.

SPLEEN: Normal in position, outline and echotexture. It measures 11.2 cms in L.A. No focal lesion seen.

KIDNEY: The right kidney measures 9.2 x 3.3 cms in size. The left kidney measures 9.7 x 4.1 cms in size. Both the kidneys are normal in position, outline and echotexture. CMD is normal in B/L kidneys. There is no evidence of hydronephrosis, obvious calculus or mass lesion seen.

URINARY BLADDER: Well distended. There is no evidence of any wall thickening or mass lesion seen in the bladder lumen.

UTERUS: Not seen (post op). There is no evidence of any focal collection/mass lesion seen at vaginal vault.

OVARIES: B/L ovaries are not well seen. No adnexal mass seen. The visualized retro peritoneum and para-aortic regions appear normal. There is no evidence of any lymph-adenopathy or ascites. There is no e/o any abnormal bowel wall thickening / mass lesion seen. No bowel loop dilatation noted. Normal peristalsis seen.

IMPRESSION:
Post hysterectomy status.

[Signature]
[REDACTED]
**DNB Radio-diagnosis,
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Fig no. 2 USG report after treatment.

DISCUSSION

The various drugs used in the treatment with their probable mode of action in Ashmari are discussed.

1. *Chandraprabha vati*

Chandraprabhavati has been determined to be safe for renal function and is indicated in *Mutrakrichha* (dysuria) and *Ashmari* (renal calculi).^[8] It destroys four types of *Ashmari*.^[9] Act on various *Anupanas* to treat various urinary system ailments. For instance, *Katakakhadiradi Kashay* is used in DM, *Trinapanchamula Kashaya* in *Ashmari*, *Purarnavasava* in UTIs or renal calculi, etc. It works well in both acute and chronic situations and has multifaceted activity. Anti-inflammatory, immunomodulator, broad spectrum antibacterial, tonic (strengthens nerves) for the urogenital system, etc.^[10]

2. *Aarogyavardhini vati*

It is called as *Sarvorogaprashamani* (destroys all the diseases).^[11] The *kutki* (*Picrorhiza kurroa*) present in *aarogyavardhini vati* does *Bhedana*.^[12] Due to its *Bhedana* property it crushes the calculus and supports in its removal.

3. *Sunishannak beeja / Shitivara beej hima (Celosia argentea)*

It has *madhura* (sweet) and *Kashaya* (astringent) taste, *Ushna veerya* (hot potency). It is *laghu* (light to digest), *Ruksha* (dry), *deepana* (kindles digestive fire) and *Ruchya* (improves taste). It is *Bastishodhaka* (cleanses urinary bladder).^[13] Also, *hima kalpana* is cold infusion which will relieve burning micturation. Therefore, the *hima* of *Sunishannak* is effective in *Ashmari*.

4. *Gokshura churna (Tribulus terrestris)*

Gokshura is *madhura* (sweet) and has *sheeta veerya* (cold potency). It is *bastivataghna*.^[14] (Relieves pain originating from urinary bladder and also *Ashmarihara*. It is *bastishodhaka*.^[15]

5. *Varuna churna (Crataeva nurvala Buch-Ham)*

Varuna has *madhura* (sweet), *tikta* (bitter), *kashaya* (astringent) and *Katu* (pungent) taste. It has *laghu*, *ruksha* properties. It has *Ushna veerya*. It has *Bhedana* property.^[16] It is *Ashmari bhedaka* (Crushes renal stone).

6. *Pashaanbheda churna (Bergenia lingulata)*

It is *Sheeta veerya* (cold potency), *Kashaya* and *tikta rasa*. Has *bhedana* property and is *Bastishodhaka* (Cleanses the bladder).^[17] It eradicates *Ashmari*.^[18]

7. *Punarnava churna*

Punarnava is *mutrala* (diuretic). It is *shothahara*^[19] (reduces inflammation) of kidneys and removal of calculi.

Viddha karma

Viddhakarma stimulates the smooth muscles of the bladder and widens the ureter, making it easier to pass the crushed stone out of the way in a downward motion. Additionally, it is a fantastic pain-relieving tool that is only developed by *Acharya Sushruta*. It helps to relieve lower abdominal dull pain from flatus and intermittent coliciness caused by obstructions in the urine's flow. Endorphins have an analgesic effect because they secrete them in response to a painful mechanical stimulus during a process.^[20]

CONCLUSION

Ayurvedic medications and *Viddha karma* effectively disintegrated the pathogenesis of *Ashmari*. Provided complete relief in all the symptoms of *Ashmari* (Renal calculi). This case illustrates the effective management of *Ashmari* with Ayurvedic medicine and also no adverse events and no recurrence.

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