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MANAGEMENT OF *MUTRASHMARI* (RENAL CALCULI) WITH A COMBINATION OF *VIDDHA KARMA* AND *SHAMANA CHIKITSA* – A CASE STUDY

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ABSTRACT:
Background: Renal calculi, also called urolithiasis, nephrolithiasis, or renal stones, affect over 10% of the population in industrialized countries and are among the most prevalent clinical conditions seen in practice. In Ayurveda, they are called Mutrashmari. Mutrashmari (renal calculi) is included in Sushruta's Ashtamahagada—i.e., deadly diseases. The Basti (urinary bladder), one of the Tri-Marma (vital parts), is the Vyakta Sthana (site of pathogenesis); because of its Marma Ashrayatwa (association with a vital organ), it is difficult to cure. It is a Tridoshaja Vyadhi with Kapha Dosha predominance.
Case Report: This is a single case study of an 18-year-old female patient suffering from complaints such as bilateral iliac region pain, intermittent colicky abdominal pain, and nausea. After diagnosis through USG, Viddha Karma (needle puncturing) was performed at the lateral border of the leg's thumb, and Shamana Chikitsa (palliative treatment) was administered for two months.
Results and Observations: All clinical symptoms disappeared within a month, and urine output improved significantly. No calculi or abnormalities were observed in the ultrasonography (U.S.G.) of the pelvis or abdomen.
Discussion: Because of the Ashmari Bhedana (lithotriptic) and Mutral (diuretic) properties, Ushna Veerya (hot potency), and Vatanulomana Karma (regulation of Vata) of Shamana Chikitsa destroy the pathogenesis of Mutrashmari, while Viddha Karma increases ureteric mobility, facilitating stone expulsion.
Conclusion: The study demonstrates that Viddha Karma combined with Shamana Chikitsa remarkably reduces pain and the size of the calculus, promoting its expulsion.

KEYWORDS: Mutrashmari, Viddha Karma, Shamana Chikitsa, Mutral, Case Report

INTRODUCTION

Renal calculi, also known as nephrolithiasis, are a common urological disease, and kidney stones affect approximately 12% of people worldwide1. In northern India, the prevalence rate of renal calculi rises to approximately 15%[1]. The most common causes of renal stone disease are inadequate water intake and reduced urine production[2]. In Ayurveda, renal stones (renal calculus/nephrolithiasis) are named Mutrashmari. The description of Ashmari is mentioned in almost all Samhita (classical texts), including its etiopathogenesis, classification, symptoms, complications, and management with Pathya-Apathya (do's and don'ts)[3]. According to Sushruta Samhita, Ashmari is classified under Mutravahasrotovikara (disease of the urinary tract) and Ashtamahagada (eight dreadful diseases). Basti is one of the main Marma (vital parts) of the body, and its injury becomes instantly fatal. Because of its Marma Ashrayatva, treatment is essential; otherwise, it becomes difficult to cure. Acharya Charaka described the Samprapti (pathogenesis) of Mutrashmari in the Trimarmiyadhyaya of Chikitsa Sthana. Vitiated Vata Dosha together with Kapha Dosha are responsible for the formation of Ashmari (renal calculi). As a result of aggravated Kapha Dosha, there is a decrease in urine volume, which leads to stone formation.[4]

Frequent hospitalization due to severe renal colic causes patients to experience psychological and financial strain. Although numerous invasive and non-invasive treatment options exist in modern science, these pharmaceutical and surgical therapies have a high recurrence rate and are costly, limiting their utility.[5]

However, much clinical research has demonstrated the effectiveness and safety of several herbal and herbo-mineral compounds used in Ayurveda to treat urolithiasis with a cure and minimal side effects.[6,7,8,9] While Shamana Chikitsa in Ayurveda has been identified as an effective therapy, Acharya Sushruta alone described Viddha Karma as a remarkably successful therapy that plays a critical role in accelerating positive outcomes.10 Therefore, it is necessary to demonstrate the effectiveness of this non-invasive technique in the treatment of certain surgical disorders such as renal calculi. The uniqueness of this case report lies in the successful management of renal calculi through the combined use of Viddha Karma and Shamana Chikitsa, offering an evidence-based Ayurvedic alternative to conventional interventions.

Case Report:
On 5th June 2024, an 18-year-old female patient visited the OPD of the Regional Ayurveda Research Institute, Nagpur, with complaints of bilateral iliac region pain, abdominal pain, burning micturition, nausea, and vomiting for the last 1.5 years. She had taken modern medicine for one year but did not experience relief from her complaints. She suddenly suffered from acute abdominal pain, nausea, and vomiting for the last month. An ultrasound of the abdomen and pelvis showed bilateral calculus in the kidneys, mainly at the lower and upper poles. According to Ayurvedic texts, this condition can be considered "Mutrashmari."

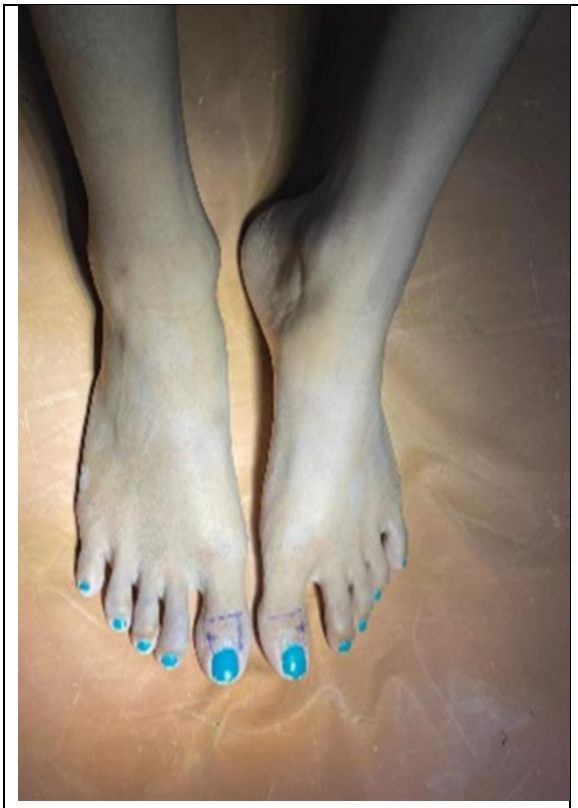
MATERIAL AND METHODS:
The probable diagnosis of Mutrashmari was made based on subjective criteria mentioned in Ayurvedic texts, such as intermittent colicky pain in the iliac region, abdominal pain, nausea, vomiting, and burning micturition. Final diagnosis was confirmed with ultrasonography, which showed a single calculus in the right kidney, largest at the lower pole, measuring 3 mm; 3–4 calculi in the left kidney, largest at the mid pole, measuring 6 mm; and a single calculus measuring 5 mm in the right upper ureter. On systemic examination, the patient did not have puffiness of the face, bipedal edema, or any signs related to the renal system. All other systemic examinations were normal. Management was done with four sittings of Viddha Karma and Ayurvedic therapeutic interventions for a duration of two months. Assessment was performed before and after treatment based on reduction in symptoms and Visual Analogue Scale (VAS) score.

Treatment Protocol:
The management was planned considering the etiopathogenesis of Mutrashmari, i.e., vitiation of Vata and Kapha Doshas. The treatment protocol was designed to interrupt this pathogenesis through Viddha Karma and Ayurvedic medicines. The complete treatment protocol is shown in Tables 1 and 2, and therapeutic interventions with assessments are presented in Table 3.

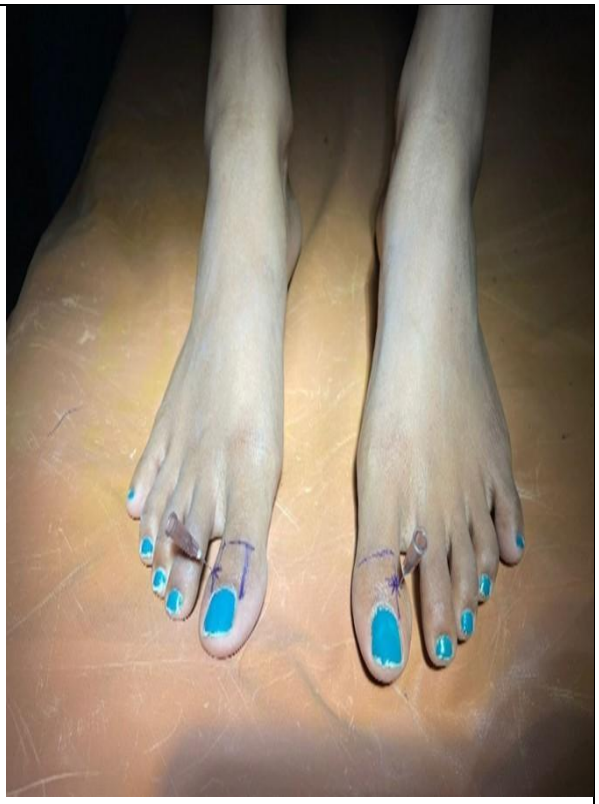
Table 1. Viddha Karma Procedure

Sr. No.	Type of Chikitsa	Material	Site	Duration
1	Viddha Karma	Needle – 26×½ G	At the lateral aspect of Angushthamula (big toe) of both feet (as shown in Figure 1)	Four sittings (15-day interval)

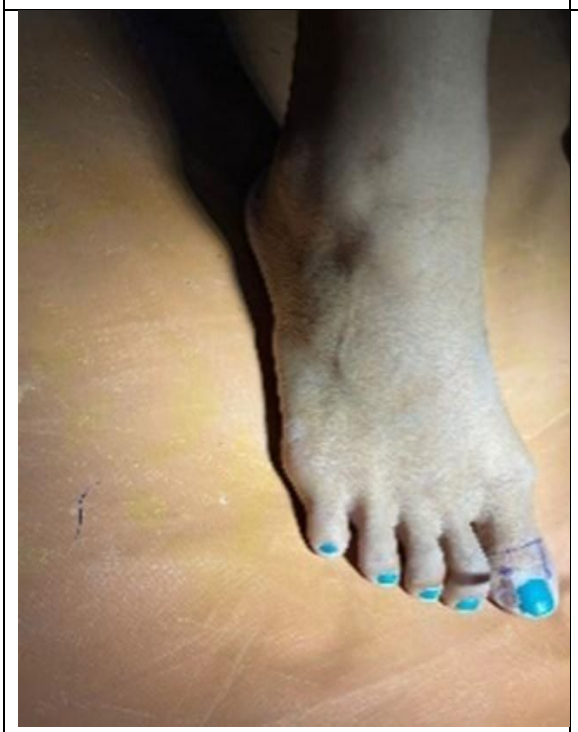
Figure 1- Site of Viddhakarma



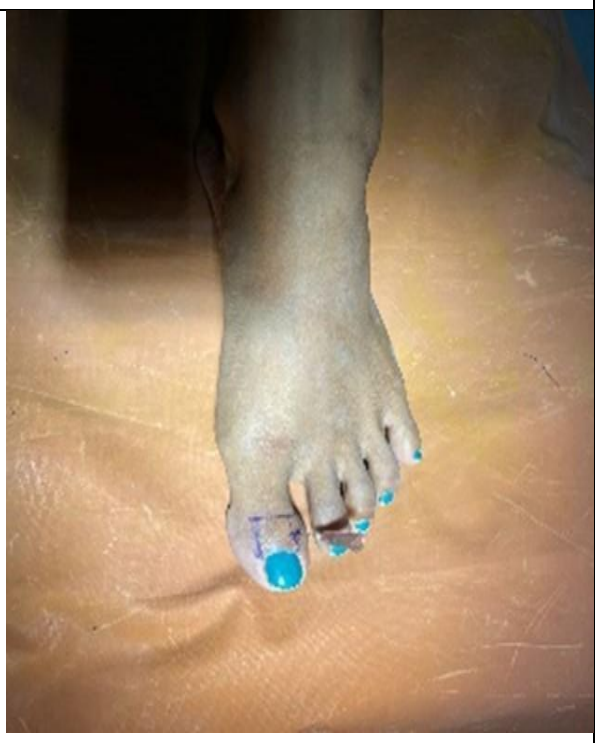
Marking the site of Viddhakarma



Viddhakarma on Bilateral Toe

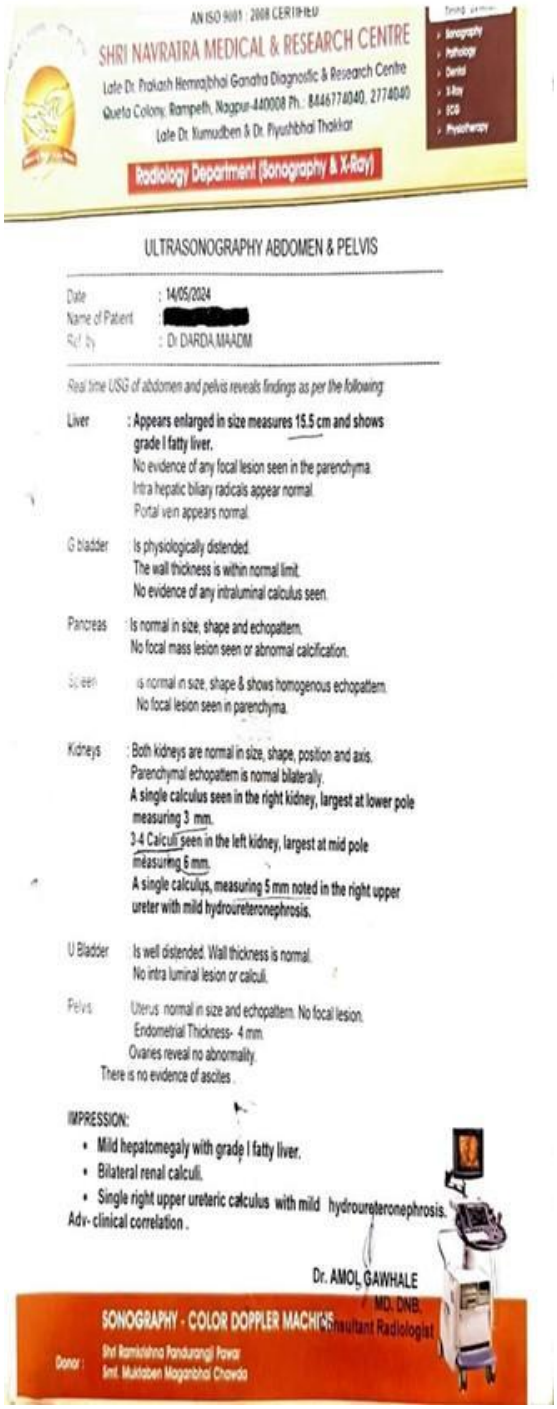


Viddhakarma on Right great Toe



Viddhakarma on Left great Toe

Figure 2- Sonographic changes



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Late Dr. Kumudben & Dr. Piyushbhai Thakkar

Radiology Department (Sonography & X-Ray)

Timing : 24 Hours
- Sonography
- Pathology
- Dental
- X-Ray
- ECG
- Physiotherapy

ULTRASONOGRAPHY ABDOMEN & PELVIS

Date : 14/05/2024
Name of Patient : [redacted]
Ref by : Dr DARDA MAADM

Real time USG of abdomen and pelvis reveals findings as per the following

Liver : **Appears enlarged in size measures 15.5 cm and shows grade I fatty liver.**
No evidence of any focal lesion seen in the parenchyma.
Intra hepatic biliary radicals appear normal.
Portal vein appears normal.

G bladder : Is physiologically distended.
The wall thickness is within normal limit.
No evidence of any intraluminal calculus seen.

Pancreas : Is normal in size, shape and echopattern.
No focal mass lesion seen or abnormal calcification.

Spleen : Is normal in size, shape & shows homogenous echopattern.
No focal lesion seen in parenchyma.

Kidneys : Both kidneys are normal in size, shape, position and axis.
Parenchymal echopattern is normal bilaterally.
A single calculus seen in the right kidney, largest at lower pole measuring 3 mm.
3-4 Calculi seen in the left kidney, largest at mid pole measuring 8 mm.
A single calculus, measuring 5 mm noted in the right upper ureter with mild hydroureteronephrosis.

U Bladder : Is well distended. Wall thickness is normal.
No intra luminal lesion or calculi.

Pelvis : Uterus normal in size and echopattern. No focal lesion.
Endometrial Thickness- 4 mm.
Ovaries reveal no abnormality.
There is no evidence of ascites.

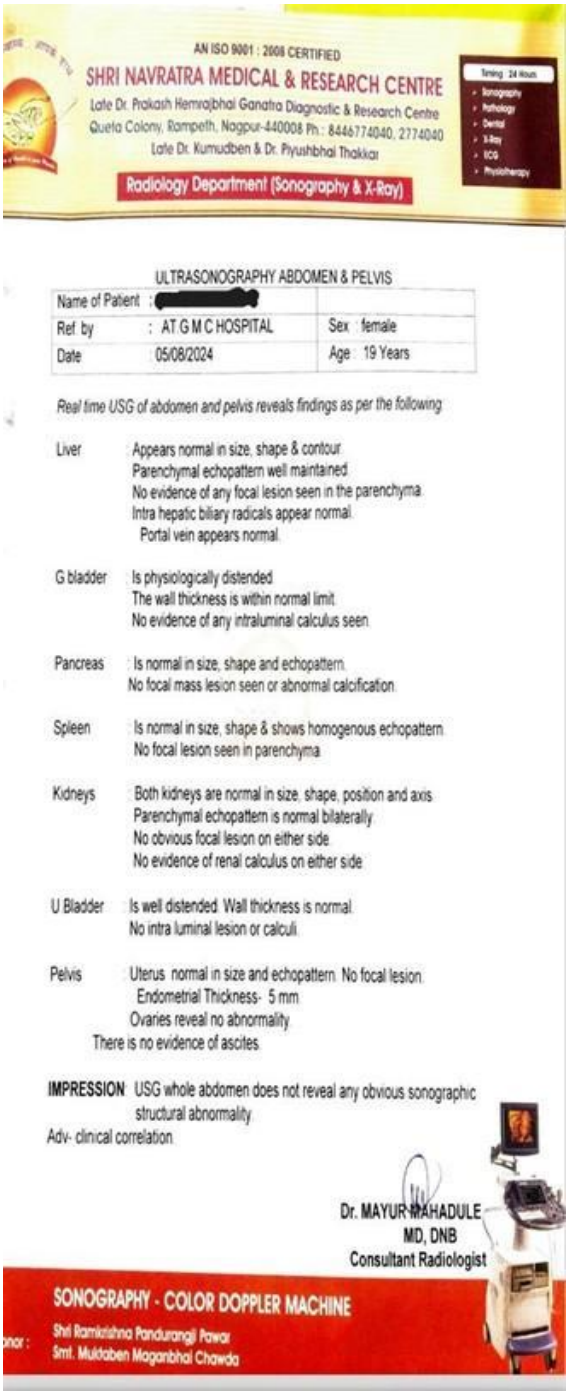
IMPRESSION:
- Mild hepatomegaly with grade I fatty liver.
- Bilateral renal calculi.
- Single right upper ureteric calculus with mild hydroureteronephrosis.

Adv- clinical correlation.

Dr. AMOL GAWHALE
MD, DNB,
Consultant Radiologist

SONOGRAPHY - COLOR DOPPLER MACHINE

Donor : Shri Ramkrishna Pandurangji Pawar
Smt. Muktaben Maganbhai Chawda



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Radiology Department (Sonography & X-Ray)

Timing : 24 Hours
- Sonography
- Pathology
- Dental
- X-Ray
- ECG
- Physiotherapy

ULTRASONOGRAPHY ABDOMEN & PELVIS

Name of Patient	[redacted]	
Ref by	: AT G M C HOSPITAL	Sex : female
Date	05/08/2024	Age : 19 Years

Real time USG of abdomen and pelvis reveals findings as per the following

Liver : Appears normal in size, shape & contour.
Parenchymal echopattern well maintained.
No evidence of any focal lesion seen in the parenchyma.
Intra hepatic biliary radicals appear normal.
Portal vein appears normal.

G bladder : Is physiologically distended.
The wall thickness is within normal limit.
No evidence of any intraluminal calculus seen.

Pancreas : Is normal in size, shape and echopattern.
No focal mass lesion seen or abnormal calcification.

Spleen : Is normal in size, shape & shows homogenous echopattern.
No focal lesion seen in parenchyma.

Kidneys : Both kidneys are normal in size, shape, position and axis.
Parenchymal echopattern is normal bilaterally.
No obvious focal lesion on either side.
No evidence of renal calculus on either side.

U Bladder : Is well distended. Wall thickness is normal.
No intra luminal lesion or calculi.

Pelvis : Uterus normal in size and echopattern. No focal lesion.
Endometrial Thickness- 5 mm.
Ovaries reveal no abnormality.
There is no evidence of ascites.

IMPRESSION : USG whole abdomen does not reveal any obvious sonographic structural abnormality.

Adv- clinical correlation.

Dr. MAYUR MAHADULE
MD, DNB
Consultant Radiologist

SONOGRAPHY - COLOR DOPPLER MACHINE

Donor : Shri Ramkrishna Pandurangji Pawar
Smt. Muktaben Maganbhai Chawda

Ultrasound dated 14/05/2024 (Before treatment)	Ultrasound report dated 05/08/2024 (After treatment)

Table 2. Ayurvedic Therapeutic Interventions

Sr. No.	Medication	Dose	Anupana	Time of Administration
1	Chandraprabha Vati (Sharangadhara Samhita, Madhyamakhanda, Adhyaya 7: 40–49)	250 mg, BD	Koshna Jala (lukewarm water)	Pragbhakta Kala (before food)
2	Varunadi Kashayam (Ashtanga Hrudayam, Sutrasthana 15/21–22) + Punarnava Kashayam (Bhaishajya Ratnavali, Udararogadhikara: 43–44)	20 ml, BD	Koshna Jala	Adhobhakta Kala (after food)
3	Shweta Parpati Bhasma (Siddha Yog Sangraha)	250 mg, BD	Koshna Jala	Pragbhakta Kala
4	Triphala Churnam (Bhaishajya Ratnavali, Paribhaprakarana: 16)	3 g	Koshna Jala	Nishikala (HS)

All medicines were procured from the Regional Ayurveda Research Institute (RARI), Nagpur. These medicines were manufactured according to the Standard Operating Procedure (SOP) referenced in The Ayurvedic Formulary of India (AFI) by Indian Medicines Pharmaceutical Corporation Limited (IMPCL), Almora, Uttarakhand.

Table 3. Timeline of Treatment Protocol and Assessment

Date	Findings	Interventions	Outcome
05/06/2024	Intermittent colicky pain in iliac region, abdominal pain, nausea, vomiting, burning micturition, constipation	Viddha Karma 1st sitting; Triphala Churnam 3 g HS with lukewarm water; Punarnava Kashayam 2 g BD after food with lukewarm water; Chandraprabha Vati 250 mg 2 BD before food with lukewarm water	VAS = 6
19/06/2024	Mild relief; improvement in colicky pain and nausea; relief in burning micturition; mild iliac pain persists	Viddha Karma 2nd sitting; Varunadi Kashayam + Punarnava Kashayam (10 ml + 10 ml) BD after food; Shweta Parpati Bhasma 250 mg BD before food	VAS = 5
03/07/2024	Relief from nausea and vomiting; reduced iliac region pain	Viddha Karma 3rd sitting; Chandraprabha Vati 250 mg BD; Varunadi Kashayam 10 ml BD; Shweta Parpati Bhasma 250 mg BD	VAS = 4
24/07/2024	Occasional mild abdominal pain	Viddha Karma 4th sitting; Shweta Parpati Bhasma 250 mg BD	VAS = 2
07/08/2024	Complete relief from abdominal pain; no new complaints; advised diet and lifestyle modifications	—	VAS = 0; USG showed no structural abnormality

Outcome:

Assessment was done using both radiological and clinical findings. After two months of treatment, the patient was completely relieved of symptoms. No emergency admission was required during treatment, and no recurrence has been

observed to date. Post-treatment ultrasound revealed no calculi or structural abnormalities. The patient achieved complete symptomatic and radiological recovery.

Table 4. Change in VAS Before and After Treatment

Symptoms	VAS (Before T/T)	VAS (After T/T)
Iliac region pain	6	0
Abdominal pain	6	0

Table 5. Change in Ultrasound of Abdomen and Pelvis Before and After Treatment

USG (Before T/T) (14/05/2024)	USG (After T/T) (05/08/2024)
A single calculus seen in the right kidney, largest at lower pole, measuring 3 mm. 3–4 calculi seen in the left kidney, largest at mid pole, measuring 6 mm. A single calculus measuring 5 mm in the right upper ureter.	USG whole abdomen does not reveal any obvious sonographic structural abnormality.

DISCUSSION:

Ashmari is a Vyadhi of Mutravaha Srotasa. It is caused due to vitiation of Vata and Kapha Doshas. Acharya Sushruta has clearly described that those who do not undergo Panchakarma treatment regularly, consume an unwholesome diet, and do not follow a proper lifestyle are more prone to recurrent renal calculi.[11] Based on the assessment of the patient's medical history, the pathogenesis of Mutrashmari was due to Ayogya Ahara-Vihara (inappropriate diet and lifestyle). The patient had a history of intake of Katu (spicy), Amla (sour), and Madhura (sweet) Rasa-dominant food, Paryushit Ahara (stale food), and junk food (1–2 times per week); Adhyashana (eating too often, without digestion of previously eaten food); low intake of water (1–2 litres per day); Vegavarodha (suppression of urges due to classes); and Ratrijagarana (staying awake late at night). Mental stress and intake of Katu and Amla Rasa aggravate Pitta Dosha; Vata Dosha gets vitiated by Adhyashana, Ratrijagarana, and Vegavarodha; while Kapha Dosha gets vitiated due to intake of Madhura Rasa and Adhyashana.

In order to manage such a condition, drugs having properties like Tridoshashamaka, Vatanulomaka (laxative), Ashmari Bhedaka (lithotriptic), and Mutrala (diuretic) are highly recommended. Based on the above-mentioned principles, the mechanism of action of treatment and each medication along with Viddha Karma is prescribed.

Viddha Karma acts on Tridosha and Rakta (blood). By clearing obstructions in Srotasa (channels), it helps release entrapped Vayu and makes its path through the body more accessible. The primary method of action of Viddha Karma is to clear the blockage of blood vessels, restore circulation, and stimulate sensory fibres from peripheral receptors to reduce the transmission of pain sensations from the affected location.[12] Viddha Karma increases the movement of the ureter and activates the smooth muscles in the bladder. This makes it easier to expel the crushed stone. Acharya Sushruta described it as an excellent pain reliever. It also helps in decreasing irregular colicky pain in the iliac region, which occurs due to obstruction of urine and flatus.[13] Along with Viddha Karma, Ayurvedic therapeutic intervention was given.

Viddha Karma can be correlated with neuromodulatory interventions such as dry needling or acupuncture. The puncture at specific nerve-dense points stimulates A-delta and C-fibres, leading to activation of pain inhibitory interneurons and endogenous opioid release. This neurophysiological modulation reduces pain perception, improves local microcirculation, and relaxes smooth muscle tone.[14] The resultant improvement in ureteric peristalsis and detrusor activity promotes natural stone expulsion and relief from colicky pain.[15]

Chandraprabha Vati contains Shilajit (Asphaltum), which helps in the management of Vyadhi (disease) of Bastipradesha (bladder). Karpura (Camphor) has anti-inflammatory, antiseptic, and diuretic properties and is mostly recommended in urinary tract infections.[16] It helps to excrete excess Kleda (moisture) through urine due to its Mutrala (diuretic) properties. It also acts on Apanavayu. Due to its Shita Veerya, it subsides all symptoms such as burning micturition. Shilajatu and Guggulu have properties like Rukshana (absorptive) and Chhedaneeya (excisive), which act on Kapha Dosha.[17] The patient had constipation initially; therefore, Triphala Churna was advised in the first visit. Triphala Churna has good laxative and digestive properties; it also acts as a Rasayana (rejuvenator).[18]

From a biomedical viewpoint, the fulvic acid in Shilajit exhibits antioxidant and nephroprotective properties, preventing oxidative injury to renal epithelium.[19] Guggulsterones possess anti-inflammatory and lipid-regulating effects, which reduce renal crystal deposition.[20] Camphor exerts mild diuretic and antimicrobial actions, contributing to urinary tract cleansing.[21] Triphala's gallic acid and tannins promote detoxification, improve digestion, and reduce oxidative stress—supporting systemic homeostasis and renal metabolism.[22,23]

Varunadi Kashayam has properties of Chhedana, Bhedana (breaking), Mutrala, and Anulomana. Because of its Vatanulomana (laxative) and Mutrala (diuretic) properties, it acts as a pain reliever.[24] It is effective in the management of urinary problems due to its diuretic, lithotriptic, and antispasmodic properties. Because of its Kaphaghna property,

Varunadi Kashayam acts as an excellent remedy for breaking down calculi into tiny particles that are easily removed from the body through urine.[25]

Pharmacological investigations have shown that Varuna (Crataeva nurvala) contains lupeol and flavonoids that inhibit calcium oxalate crystal aggregation, demonstrating a lithotriptic mechanism consistent with the Ayurvedic description of "Ashmari Bhedana."[26] Punarnava (Boerhavia diffusa) has been found to increase glomerular filtration rate and exert anti-inflammatory activity through suppression of TNF-α and IL-6 pathways. Shweta Parpati acts as a urinary alkalizer, supporting solubilization of urate and phosphate stones, while improving renal excretion dynamics.[27]

Punarnava Kashayam contains Punarnava (Boerhavia diffusa L.), which has diuretic and anti-inflammatory properties. Due to its diuretic action, it removes toxins and excess fluid from the body and Punarnava has Tridoshahara and Anulomaka (laxative) properties, acting on urinary disorders. Punarnava mainly acts on Kapha Dosha and balances Vata Dosha.[28] Shweta Parpati has diuretic, analgesic, anti-inflammatory, and urinary supportive effects that speed up the flow of blood to the kidneys, enhancing their functionality and increasing urine output.29 All ingredients of Shweta Parpati are Mutrala (diuretic) and Vatanulomaka (laxative); therefore, it is very effective against urinary calculi and other urinary disorders.[30]

Together, these formulations exert synergistic effects—anti-lithiatic, anti-inflammatory, nephroprotective, and diuretic—while simultaneously balancing Doshas. The combination of mechanical (Viddha Karma) and pharmacological (Shamana Chikitsa) actions thus achieves both physiological normalization and biochemical correction, providing management of Mutrashmari

CONCLUSION

The combined use of Viddha Karma and Shamana Chikitsa proved highly effective in managing Mutrashmari . The patient achieved complete symptomatic and radiological recovery within two months, with no recurrence, adverse events, or treatment-related complications.Viddha Karma enhanced ureteric motility and pain relief, while the administered Ayurvedic formulations exhibited Mutral, Ashmari Bhedana, and Tridoshahara properties. This integrative, non-invasive approach offers a safe, cost-effective alternative for the management of renal calculi and warrants further clinical validation through larger studies.

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