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A Single Case Study to Evaluate the Effect of*PashanabhedadiKashaya* in Urolithiasis (*Mutraashmari*): A Clinical Case Report

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Abstract

Mutraashmari(urolithiasis) is a urinary disorder characterized by calculus formation and clinical manifestations such as flank pain, dysuria, increased urinary frequency, and difficulty in micturition. Ayurveda correlates it with *Ashmari* and explains the pathophysiology as due to vitiated doshas and blockage of the *Mutravaha srotas.* A 40-year-old male patient came in with a complaint of a right kidney stone. The patient was having pain in the right lumbar region, pain in the lower abdomen, painful and burning urination, a frequent urge to pass urine, and difficulty passing urine. The patient was managed with the administration of *Pashanabhedadikashaya* as the only therapy during the course of treatment. After the treatment, the pain in the right lumbar region decreased from 6/10 to 1/10, while the pain in the lower abdomen, dysuria, difficult passage of urine, and renal angle tenderness were cured. The frequency of urination also reduced from 8-10 times a day to 5-6 times a day. The ultrasound scan showed a decrease in the size of the calculus from 7 mm to 1 mm in the lower pole of the right kidney. The number of red blood cells in the urine also reduced from 2-3/HPF to 0-1/HPF, while the serum creatinine level was normal. All these signs and symptoms witnessed in the patient have improved after the treatment, which indicates the positive effects of *Pashanabhedadikashaya*on the management of *Mutraashmari*.

Keywords:*Ashmari, Mutraashmari, Pashanabhedadikashaya, ShamanaChikitsa, Urolithiasis.*

Introduction

Urolithiasis is a common disorder of the urinary tract characterized by the formation of calculi within the kidney, ureter, urinary bladder, or other parts of the urinary system. It is associated with considerable morbidity because of renal colic, hematuria, dysuria, urinary obstruction, infection, and, in complicated cases, impairment of renal function.[1] The prevalence of urinary stone disease varies considerably according to geographical, climatic, dietary, metabolic, and genetic factors, with reported prevalence ranging approximately from 1% to 13% in different populations.[2] The recurrence tendency is also an important clinical concern, making both effective treatment of the existing calculus and prevention of recurrence are essential components of management.[3] The formation of urinary calculi is a multifactorial process involving urinary supersaturation, nucleation, crystal growth, aggregation, and retention within the urinary tract. Calcium oxalate and calcium phosphate constitute the majority of urinary stones, while uric acid, struvite, and cystine stones represent other important types.[4] Low fluid intake, dietary factors, obesity, metabolic abnormalities, and certain systemic disorders may increase the risk

of stone formation. Contemporary management depends on the size, composition, location, and clinical consequences of the calculus. Small uncomplicated stones may pass spontaneously, whereas larger or obstructive stones may require pharmacological, endoscopic, extracorporeal, or surgical intervention.[5] From the Ayurvedic perspective, urolithiasis can be correlated with *Mutraashmari*, a disorder of the *Mutravaha Srotas*. AcharyaSushruta has described *Ashmari*among the *Ashtamahagada*, emphasizing its severe and potentially complicated nature.[6] The condition is characterized by the formation of a hard, stone-like structure within the urinary system and is associated with symptoms such as *Mutrakrichhra* (difficulty in urination), *Mutradaha* (burning micturition), *Basti Shoola* (bladder/urinary pain), and *Rakta Mutra* (hematuria).[7] Ayurvedic literature describes the involvement of *Dosha*, particularly *Vata* and *Kapha*, together with abnormalities in the urinary pathway leading to the formation and growth of the calculus.[8] Ayurvedic management of*Mutraashmari* includes both conservative and surgical approaches depending upon the size, location, severity, and complications of the stone. Classical texts describe several medicinal formulations possessing properties such as *Ashmaribhedana*(disintegration of calculus), *Mutrala* (promoting urinary flow), *Shoolahara (*relieving pain), and *Kaphavataharaa*ctivity.[9] These therapeutic principles may facilitate reduction in urinary stasis, promote passage of small calculi, and alleviate associated symptoms. Previous clinical investigations have reported encouraging outcomes with different Ayurvedic formulations in patients with *Mutraashmari*, including reductions in stone size and improvement in pain, dysuria, and other urinary symptoms.[10] Among the Ayurvedic formulations used in the management of *Mutraashmari,PashanabhedadiKashaya* is of particular interest because its constituent drugs are described with properties relevant to urinary calculus management. The formulation comprises *Pashanabheda*(*Bergenialigulata*), *Gokshura*(*Tribulusterrestris*), *Varuna* (*Crataevanurvala*), *Eranda*(*Ricinuscommunis*), *Brihati*(*Solanumindicum*), *Kantakari*(*Solanumxanthocarpum*), and *Ikshuramoola*.[11] The classical actions attributed to these ingredients include *Ashmaribhedana, Mutrala, Bhedana, Bastishodhana, Shoolahara, Shothahara,* and *Kaphavataharaa*ctivities. Collectively, these actions may support disintegration or fragmentation of the calculus, increase urinary flow, reduce urinary tract irritation and inflammation, and facilitate the expulsion of small calculi.[12] Therefore, the present case report evaluates the clinical and radiological response to *PashanabhedadiKashaya*administered as the sole therapeutic intervention in a patient with *Mutraashmari*.

CASE REPORT

A 40-year-old male with a known case of urolithiasis (*Mutraashmari*)visited Gangaputra Medical College and Hospital, Jind, on 7/7/2025 with complaints of right-sided flank pain for approximately 3 months. The patient was registered under OPD No. 18815/2433. The pain was intermittent and was associated with lower abdominal pain for 1 month. The patient also reported burning micturition for 20 days, increased urinary frequency for 15 days, and occasional difficulty in urination. There was no history of gross hematuria. On clinical evaluation, the patient's symptoms were suggestive of urinary calculus (*Mutraashmari*). Baseline ultrasonography (USG) of the urinary tract was performed to assess the presence, number, and size of calculi. The USG revealed multiple urinary calculi, with the largest calculus measuring approximately 7 mm. These findings confirmed the presence of multiple urinary stones and established the baseline radiological status before initiation of treatment. Based on the clinical presentation and ultrasonographic findings, the patient was diagnosed with urolithiasis (*Mutraashmari*) with multiple urinary calculi. Vitals on the initial visit were as follow**:**

1. **Blood Pressure:** 140/80mmHg
2. **Pulse Rate:** 70/min
3. **Weight:** 77kg
4. **Height :**5'9"

Table 1:*AshtavidhaPariksh*a on the First Day Visit of the Patient

Parameters	**Findings**
***Nadi*(Pulse)**	*VatajPittaj*
***Mala* (Stool)**	*Avikrit* (Normal)
***Mutra* (Urine)**	*Ishapeteeta* (Normal)
***Jihwa*(Tongue)**	*Saam* (Coated)
***Shabda*(Speech)**	*Spashta* (Clear)
***Sparsha* (Touch)**	*AnushmaSheeta* (Moderate Temperature)
***Drika* (Eyesight)**	*Avikrit*(Normal)
***Akrti* (Body Appearance)**	*Sthula*(Obesity)

Therapeutic Approach

Dietary and Lifestyle Protocol (*Pathya–Apathya*) for *Mutraashmari*

In the clinical management of *Mutraashmari* (urolithiasis), adherence to a structured *Pathya–Apathya* regimen plays a critical role alongside pharmacological interventions such as *PashanabhediKashaya*. Table 2 outlines the recommended dietary habits and lifestyle modifications aimed at facilitating stone dissolution, preventing recurrence, and maintaining optimal urinary tract health. Notably, within dairy intake, high-volume or nighttime consumption of *Dadhi* (curd) is restricted (*Apathya*) due to its potential to increase *Kapha* and channel obstruction. Conversely, regulated, low-dose administration of *Dadhi* (12 ml daily) or fresh *Takra* (buttermilk) is recommended (*Pathya*) as a source of dietary probiotics and mineral balance.[13]

Table 2.*Pathya–Apathya* (Dietary and Lifestyle Recommendations) for *Mutraashmari*

Category	***Pathya*(Recommended)**	***Apathya* (Restricted)**
Fluid intake	Adequate water intake throughout the day according to individual requirements	Inadequate fluid intake and prolonged periods without drinking water
Fruits	Water-rich fruits such as watermelon, citrus fruits, and other suitable seasonal fruits	Excessive intake of foods individually identified as stone-promoting
Vegetables	Fresh, easily digestible vegetables and vegetable-based preparations	Excessive intake of high-oxalate vegetables where clinically indicated

Cereals	Easily digestible cereals and whole grains in appropriate quantities	Excessive intake of highly processed cereal products
Dietary salt	Moderate salt intake	Excessive salt and highly salted foods
Protein	Moderate and balanced protein intake	Excessive intake of animal protein
Dairy products	Appropriate dietary calcium from normal food sources; controlled intake of fresh Dadhi (curd) (12 ml daily)	Excessive or unnecessary calcium supplementation without medical advice
Processed foods	Fresh, minimally processed foods	Packaged foods, fast foods, and highly processed foods
Beverages	Adequate water and suitable non-sugary fluids	Excessive sugary beverages and carbonated drinks
Lifestyle	Regular physical activity and avoidance of prolonged sitting	Sedentary lifestyle and prolonged inactivity
Urination	Timely emptying of the bladder	Habitual suppression of the urge to urinate
Meal pattern	Balanced and moderate meals at regular intervals	Excessive overeating and irregular dietary habits

PashanabhedadiKashaya

Based on the clinical assessment and Ayurvedic diagnosis of *Mutraashmari*, *PashanabhedadiKashaya*was selected as the sole therapeutic intervention. The formulation was administered in the prescribed dose and frequency, and the patient was followed clinically and radiologically during the treatment period.[14]

Mode of Action –*PashanabhediKashaya*

Actions of the Drugs Based on *Nighantus*

I.Pashanabheda (*Bergenialigulata*)

- **Chemical Constituents:**Bergenin, Catechin, Gallic acid, β-Sitosterol, Arbutin, Quercetin glycosides, Kaempferol glycosides, and Pashaanolactone.
- **Action (*Karma*):** *Aśmaribhedana, Mutrala, Śothahara, Bastisodhana.*

II.Gokshura (*Tribulusterrestris*)

- **Chemical Constituents:** Protodioscin, Diosgenin, Protogracillin, Quercetin, Kaempferol, β-Sitosterol, Stigmasterol, Saponins.
- **Action (*Karma*):** *Mūtrala, Aśmarīghna, Bastīśodhana,Vātapittaśāmaka.*

III.Varuna (*Crataevanurvala*)

- **Chemical Constituents:** Lupeol, β-Sitosterol, Oleanolic acid, Ursolic acid, Friedelin, Crateavic acid, Saponins, Flavonoids.
- **Action (*Karma*):** *Amarībhedana, Mūtrala, Bhedana, Kaphapittaśāmaka.*

IV.Eranda (*Ricinuscommunis*)

- **Chemical Constituents:** Ricinoleic acid, Linoleic acid, Oleic acid, Palmitic acid, Stearic acid, Quercetin, Kaempferol, Rutin, β-Caryophyllene.
- **Action (*Karma*):***Vatahara, Śulahara, Śothahara, Recanīya.*

V.Brihati (*Solanumindicum*)

- **Chemical Constituents:** Solasodine, Solamargine, Solasonine, Diosgenin, Steroidal alkaloids, Flavonoids, Glycoalkaloids, Saponins.
- **Action (*Karma*):** *Śūlahara, Śothahara, Mūtrala, Kaphavātahara.*

VI.*Kantakari (*Solanumxanthocarpum)

- **Chemical Constituents:** Solasodine, Solasonine glycosides, Steroidal alkaloids, β-Sitosterol, Diosgenin, Flavonoids, Saponins, Tannins.
- **Action *(Karma)*:** *Śūlahara, Śothahara, Mūtrala, Kaphavātahara.*

VII.Ikshuramoola (*Asteracanthalongifolia*)

- **Chemical Constituents:**β-Sitosterol, Stigmasterol, Ecdysterone, Flavonoids, Saponins, Tannins, Phenolic compounds, Essential oils.
- **Action (*Karma*):***Mūtrala, Bastīśodhana, Vātapittaśāmaka.*

Table 3.Mode of action and key benefits of the ingredients in *PashanabhediKashaya*for urolithiasis

Ingredient (Botanical Name)	***Part Used***	**Lithotripsy *(Aśmarībhedana)***	**Diuretic *(Mūtrala)***	**Anti-Inflammatory *(Śothahara)***	**Analgesic & Antispasmodic**	**Anti-Haemorrhagic (Hemostatic)**	**Antioxidant/anti-urological**	**Key Benefits**
Pashanabheda (Bergenialigulata) 	Rhizome	Strong lithotriptic, stone breaking	Promotes urine flow, facilitates stone expulsion	Reduces inflammation and mucosal edema	Relieves pain and ureteric spasm	Astringent &haemostatic, helps reduce haematuria	Antioxidant, prevents crystal aggregation and recurrence	Breaks calculi; reduces pain, burning, and haematuria helps in passage of small stones.
Gokshura (Tribulusterrestris) 	Fruit	Helps in breaking small stones	Potent diuretic, increases urine volume	Reduces inflammation of urinary tract	Relieves pain and spasm	Mild haemostatic support	Prevents stone formation, antioxidant	Increases urine output; helps expel calculi relieves pain & spasm.

Varuna (Crataevanurvala) 	Bark	Lithotriptic, stone dissolving property	Promotes diuresis and clears urinary obstruction	Anti-inflammatory, reduces urinary tract swelling	Relieves pain, spasm & colic	Supports reduction of bleeding and irritation	Prevents recurrence of calculi	Breaks and dissolves stones; relieves obstruction; reduces irritation and bleeding.
Eranda (Ricinuscommunis) 	Seed	Indirect aid in stone passage	Mild diuretic support	Strong anti-inflammatory action	Relieves pain and ureteric spasm	Mild haemostatic support	Antioxidant, reduces oxidative stress	Relieves pain & spasm; reduces inflammation.
Brihati (Solanumindicum) 	Whole Plant	Supportive action	Diuretic property	Anti-inflammatory, reduces swelling	Analgesic & antispasmodic	Mild haemostatic support	Antioxidant support	Reduces inflammation; relieves pain & spasm.
Kantakari (Solanumxanthocarpum) 	Whole Plant	Supportive action	Promotes urine flow	Anti-inflammatory, useful in irritation	Relieves pain and spasm	Mild haemostatic support	Antioxidant activity	Relieves irritation; reduces pain & spasm; promotes diuresis.

Ikshuramoola (Asteracanthal ongifolia) 	Root	Supportive action	Potent diuretic, cleanses urinary tract	Anti-inflammatory and coolin g effect	Mild antispasmodic action	Mild haemostatic support	Antioxidant, reduces crystal formation	Promotes urine flow; helps in expulsion of stones; prevents recurrence.

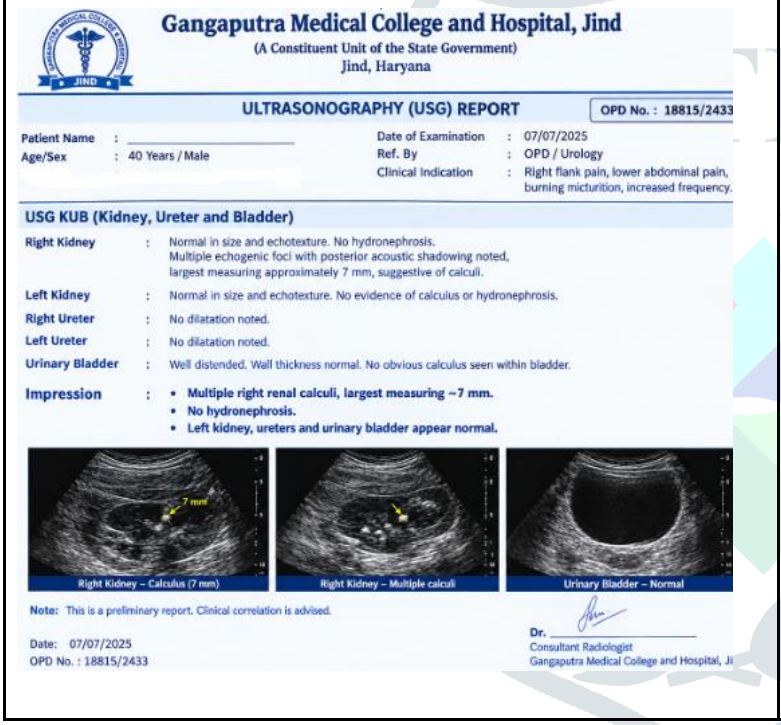
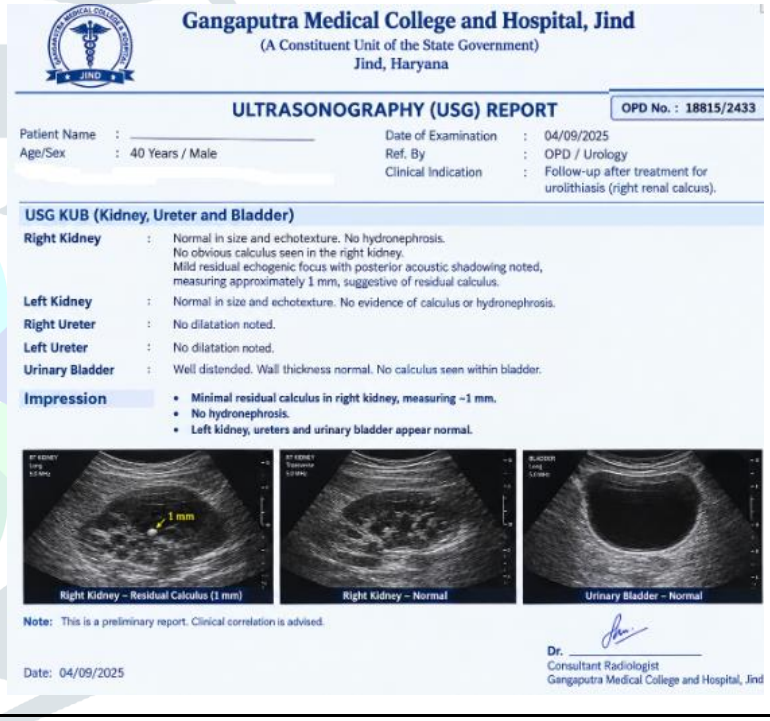
Results

The patient demonstrated clinical and radiological improvement following treatment with *PashanabhedadiKashaya*as the sole therapeutic intervention. Right-sided flank pain reduced from 6/10 to 1/10, while lower abdominal pain, burning micturition, difficulty in urination, and renal-angle tenderness resolved. Urinary frequency decreased from 8–10 to 5–6 times/day. Ultrasonography demonstrated a reduction in the right renal calculus from 7 mm to 1 mm. Urinary RBCs improved from 2–3/HPF to 0–1/HPF, while calcium oxalate crystals were reduced/absent on follow-up examination. Serum creatinine remained within the normal range, changing from 0.92 to 0.88 mg/dL.

Table 4. Comparative Assessment of Clinical Parameters Before and After Treatment

Clinical Parameter	**Before Treatment (7/7/25)**	**After Treatment (4/9/25)**
Right-sided flank pain	Present for 3 months; moderate intensity (6/10)	Mild/absent (1/10)
Lower abdominal pain	Intermittent; moderate (4/10)	Absent
Burning micturition	Present for 20 days; moderate	Absent
Increased urinary frequency	Present for 15 days, 8–10 times/day	5–6 times/day
Difficulty in urination	Occasionally present	Absent
Gross hematuria	Absent	Absent
Right renal-angle tenderness	Present	Absent

Stone size on USG	7 mm (multiple calculi)	1 mm (residual calculus)
Urine RBC	2–3/HPF	0–1/HPF
Urine crystals	Few calcium oxalate crystals	Occasional/absent
Serum creatinine	0.92 mg/dL	0.88 mg/dL

Before Treatment	**After Treatment**
	

Discussion

Nidana and *Samprapti* of *Mutraashmari:*

According to Ayurveda, *Mutraashmari* develops due to derangement of *Dosha* and obstruction of the *Mutravaha Srotas*. Improper dietary habits, inadequate fluid intake, excessive intake of heavy and unsuitable foods, sedentary lifestyle, and suppression of the natural urge to urinate may contribute to the development of urinary calculi. These factors may disturb *Agni* and promote *Kapha* accumulation, while *Vata* contributes to obstruction and abnormal movement within the urinary tract.[16] The vitiated *Dosha* associated with *Mutra* gradually contributes to the formation and retention of a hard mass, described as *Ashmari*. In the present case, the patient had urinary symptoms, including flank pain, lower abdominal pain, burning micturition, increased urinary frequency, and difficulty in urination, suggesting involvement of the *Mutravaha Srotas*. The *Vata-PittajaNadi* finding and *SaamaJihwa* further supported the clinical Ayurvedic assessment.

Dietary and lifestyle considerations:

Dietary and lifestyle modification was advised as supportive management along with the principal intervention. Adequate hydration was emphasized to maintain urinary flow and reduce urinary stasis. Water-rich fruits, fresh vegetables, balanced meals, moderate dietary salt and appropriate dietary calcium were recommended, while excessive salt, highly processed foods, excessive animal protein, sugary or carbonated beverages, and inadequate fluid intake were restricted.[17] Regular physical activity, avoidance of prolonged sitting, and timely evacuation of urine were also advised. These measures are relevant because adequate fluid intake and appropriate dietary habits may reduce urinary concentration and support prevention of further crystal aggregation and stone formation. The dietary and lifestyle recommendations used in the case are presented in Table 2.

Probable action of *PashanabhedadiKashaya*:

The therapeutic effect of *PashanabhedadiKashaya* may be understood through the combined actions of its seven constituent drugs. *Pashanabheda* possesses prominent *Ashmaribhedana* and *Mutrala* properties and may contribute to calculus disintegration and elimination. *Gokshura*supports urinary flow through its *Mutrala* action, while *Varuna* possesses *Ashmaribhedana, Bhedana, Mutrala,* and *Shothahara* properties. *Eranda* contributes *Vatahara, Shoolahara,* and *Mutrala* actions.[18]*Brihati* and *Kantakari* provide *Shoolahara* and *Shothahara* effects, whereas *Ikshuramoola* contributes *Mutrala* and *Bastishodhana* properties. Thus, the formulation may act through a complementary sequence of *Ashmaribhedana/Bhedana → Mutrala → Bastishodhana→ Shoolahara/Shothahara,* potentially facilitating stone passage while reducing urinary discomfort and inflammation.[19,20]

Clinical and radiological outcome:

In the present case, treatment with *PashanabhedadiKashaya* alone was associated with improvement in both subjective symptoms and objective findings. Right-sided flank pain decreased from 6/10 to 1/10, while lower abdominal pain, burning micturition, difficulty urinating, and renal angle tenderness resolved. Urinary frequency decreased from 8–10 to 5–6 times per day. Ultrasonography demonstrated a reduction in the right renal lower-pole calculus from 7 mm to 1 mm, while urinary RBCs decreased from 2–3/HPF to 0–1/HPF. Serum creatinine remained within the normal range, changing from 0.92 to 0.88 mg/dL. These findings indicate a favorable clinical and radiological change during the treatment period.

Conclusion

This case demonstrated clinical and radiological improvement in *Mutraashmari* following treatment with *PashanabhedadiKashaya* alone. Marked improvement in pain, urinary symptoms, and urinary RBCs was accompanied by a reduction in calculus size from 7 mm to 1 mm. The observed response suggests the potential role of *PashanabhedadiKashaya* in facilitating stone reduction and improving urinary symptoms. Further controlled clinical studies are required to establish its efficacy.

Limitation of the Study

As this was a single case study, the findings cannot be generalized. Further studies involving larger sample sizes, standardized treatment protocols, longer follow-up, and appropriate comparative groups are required to establish the efficacy and safety of this approach.

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