

Management of Urolithiasis with a Combination of Viddha Karma and Shamana Chikitsa-A Case Study

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Abstract

Mutrashmari is a pathological condition of the urinary system where aggregation of urinary crystalloids takes place anywhere in the urinary tract, i.e., from the kidney to urinary bladder. Because of changes in lifestyle, dietary habits, and treatment modalities, its incidence and prevalence have increased significantly over the past few decades. Mutrashmari (urinary stones) is one among the Ashtamahagada (eight fatal conditions) and is Kapha pradhan Tridoshaja Vyadhi, which is correlated with urolithiasis. It is the major cause of morbidity. The lifetime prevalence of symptomatic urolithiasis is approximately 10% in men and 5% in women. Many treatment modalities have been adopted in medical sciences, but it is quite expensive and also the pathogenesis behind recurrence of formation of stone cannot be avoided.

Keywords: Mutrashmari, Urolithiasis, Urinary Calculi, Ayurveda

Introduction

Ashmari (urinary stones) is the condition in which there is formation of a substance like stone [1]. Mutrashmari (urinary stone) is one among the Ashtamahagada (eight fatal conditions) [2]. It is considered difficult to cure because of its Marma Ashrayatwa due to involvement of Basti, which is one of the Tri Marma (three vital parts), being the Vyakta Sthana [3]. It is Kapha predominance Tridoshaja Vyadhi [4]. As per the clinical features, it is compared to urolithiasis. It is the formation of stony concretions in the bladder and urinary system. It is the common diseases of Mutravaha strotas (urinary tract) that occur due to disequilibrium between stone inhibiting and promoting factors in the urinary system. In alternative medicines, mainly surgery is described but as per Acharya Sushruta he said that before going for surgical procedures one should try with oral medications such as medicated alkali preparation, decoction, medicated ghee, and medicated oil, which possesses the properties such as diuretic, splitting, scarification, breaking, and cutting; it facilitates the dissolution of the urinary stones [5].

Aim

The purpose of this study was to assess the efficacy and safety of a comprehensive Ayurvedic treatment approach, combining herbal and herbo-mineral formulations (Viddhakarma and Shamana Chikitsa), for the management of renal stones and related clinical features."

Material and Methods A Single Case Study

Table 1: The demographic details of the patient are tabulated.

Sr. No	Demographic Details	
1.	Name	abc
2.	Age	65yr
3.	Sex	Male
4.	Address	Sangli
5.	Marital Status	Married
6.	Socio Economical Status	Upper middle class

Chief Complaints

Chief & associated complaints of the patient are tabulated in Tables 2 respectively

Table 2: Chief & associated complaints of the patient

S. N.	Symptoms	Severity	Duration
1.	Dull diffuse pain in lower abdomen at right side	05(VAS)	6yr
2.	The patient experiences constant pain in lumbar region, with a history of aggravated pain, especially in the morning or after prolonged standing."	04(VAS)	15Days
3.	Burning Micturition		10 Days
4.	Hesitancy of micturition	Day and night	1 month

Table 3: History of the patient

S. No	Heads	Duration	Details of the Patient
1.	k/c/o Lumbar spondylosis	13 yr	H/o taking Calcium supplements for 3 months
2.	k/c/o DM I	10 yr	Inj. HAI 25U BFBD
3.	k/c/o hypothyroidism	9 yr	Not on regular medication
4.	H/O renal calculi	Since 6yr	6mm renal calculi
5.	Medication	6 yr	Tab. Ecosprin gold 75/20 mg

History of Present Illness

- A 65-year-old male patient presented with:
- Intermittent Colicky pain in the right loin region
- Dull diffuse pain in lower abdomen at right side
- The patient experiences constant pain in lumbar region, with a history of aggravated pain,---especially in the morning or after prolonged standing
- He was diagnosed with degenerative lumbar spondylosis by an orthopedic physician 13 yr prior. Despite three months of treatment with calcium supplements, analgesics, his symptoms persisted. A months ago, he developed acute pain in the lower abdominal and left loin regions, accompanied by urinary complaints:
- Burning micturition
- Hesitancy during micturition
- Scanty and turbid urine
- He was hospitalized and managed with local antispasmodic and hydrotherapy for a renal stone, confirmed by radiological evaluation (U.S.G. abdomen and pelvis)."

General Examination

BP - 150/90 mmhg

PR - 90/min
RR - 18/min
Height - 5'9"
Weight - 75.6 kg
Temperature - 98.5° F

Pallor - +

Dashavidha Pariksha

Prakruti - Vata Pradhana

Vikruti - Avara
Saara - Avara
Samhanana - Avara
Pramana - Avara
Saatmya - Madhyama
Satwa - Madhyama
Aaharashakti - Avara
Vyayamashakti - Avara

Systemic Examination

Vaya

RS - Clear, AE = BS a

CVS - S₁S₂ Normal

CNS - Conscious and oriented

- Vruddha

PA - Soft, mild tender at Right iliac region

Ashtavidha Pariksha

Nadi - Pitta

Mala - Saam

Mutra - Sadaha Pravrutti

Jivha - Shuskha

Druk - Prakrut

Sparsha - Anushna

Akruti - Sthul

Shabda - Spast

Investigation

USG-Abdomen & Pelvis (18/03/2024)

There is 6mm oblong calculus seen at right lower ureter causing resultant hydronephrosis 3cm away uv junction



Fig 1: USG-Abdomen & Pelvis (18/03/2024)

Diagnosis

Mootrashmari with Pittaja Mootrakruchha with katigatvat

Intervention

The Treatment prescribed for this patient is provided in Table

 Table 4: Treatment prescribed

Type of Chikitsa	Material	Site	Duration
Viddhakarma Needle no. 26 ½ At the lateral border of the thumb of the left leg on an alternate day Once an alternate day (total 12 sittings)	Needle no. 26 1/2	At the lateral border of the thumb of the left leg on	Every 3 rd day (total 12 sittings)
Agnikarma	Panchadhatu Shalaka	Lumbar region	15 sittings (alternate day)
Nadi Swedana	Dashmoola kwath	Lumbar region	Daily

Table 5: Mode of action of drugs

Internal medication	Dose	Anupana	Time of administration	Duration
Chandraprabha Vati	250 mg 2Tabs T.D.S	Lukewarm water	Before food	1 Month
Tab neeri	2 Tab BD	Lukewarm water	After food	1 Month
Bruhat Varunadi Kashaya	15ml BD	Lukewarm water	before food	1 Month
Tab. Gokshuradi guggul	2 Tab BD	Lukewarm water	After food	1 Month

Table 6: Assessment of the patient based on clinical features.

S.N.	Symptoms	Before Treatment (Before 1 month)	On 15th Day	After Treatment (1 month)
1.	Intermittent Colicky pain in the left loin region	08 (VAS)	Absent	Absent (No episode till date)
2.	Dull diffuse pain in lower abdomen at right side	04(VAS)	Absent	Absent (No episode till date)
3.	Burning Micturition	Constant	Absent	Absent
4.	Hesitancy of Micturition	Throughout the day & night	Absent	Absent
5.	The patient experiences constant pain in lumbar region, with a history of aggravated pain, especially in the morning or after prolonged standing.	04(VAS)	Absent	Absent
6.	Fullness in abdomen(bloated)	06(VAS)	Absent	Absent

After the above treatment course was finished Repeat USG Scan was done on 25/04/2024 showing-

USG-Abdomen & Pelvis (25/04/2024)

There is 5.5mm calculus at right UV junction causing resultant hydronephrosis.

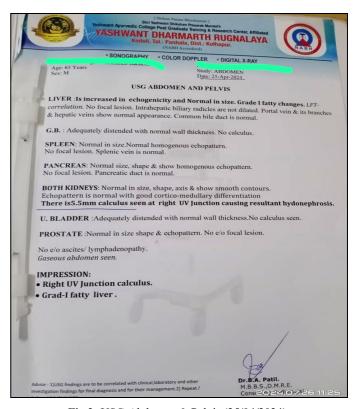


Fig 2: USG-Abdomen & Pelvis (25/04/2024)



Fig 3: Vidhyakarma

Observation and Results

Results observed after treatment showed improvement of symptoms of pain in Abdomen (udarshoola), Burning micturition was resolved.

Discussion

The main etiological factors for the formation of Mutrashmari include dietary factors-Vitamin A deficiency, hot climate, decrease in citrate level any kind of urinary stasis, infections in the kidney, prolonged immobilization, medullary sponge kidney, hyperparathyroidism, hyperoxaluria, cystinuria, and renal tubular acidosis ^[6].

Sushruta mentioned Ashmari under Ashtomahagada due to its recurrence and bad prognosis [7].

Patients treated with the above mentioned drugs have shown significant results in treating pain (Vedana), increased frequency, and burning micturition (Sadaha Mutrata)

Due to painful mechanical stimulus at the time of procedure, the secretion of endorphins may induce its analgesic action. The secretion of endorphins may help subside both intermittent colicky and constant dull pain in the left loin region & lower abdomen due to obstruction of the flow of Urine & flatus. Acharya Sushruta exclusively elaborated Viddha Karma as an excellent pain relief tool. It is also an excellent pain relief tool that helps to subside both intermittent colicky and constant dull pain. Viddha Karma activates the smooth muscles of the urinary bladder, allowing for easy elimination of the crushed stone in a downwards direction, and increases the movement of the ureter."

Mode of Action of Drugs

Tab Neeri: Exhibits anti-urolithiasis effects, as demonstrated by an in-vitro study (Bhandari R *et al.*, 2021), and relieves urinary tract infection (UTI) symptoms like burning micturition and hesitancy due to its anti-microbial properties (Bhusal N *et al.*, 2011).

Hingashtak Choorna and Shankh Vati alleviate symptoms of Annavaha Strotodushti Lakshana, such as renal colic, due to their Agnidipaka, Amapachaka, and Ruchya properties. They also act as emergency drugs for renal colic management due to their Shoolaghna property.

Hingashtak Choorna corrects Apanavata vitiation caused by Vegavarodha, subsiding bloated abdomen discomfort by balancing Apanavayu and Samavayu.

Shankh Vati's analgesic properties, attributed to Ahifena (Opium), help alleviate intermittent colicky pain in the left loin region and migrate constant dull pain in the left loin region and lower abdomen."

Chandraprabha Vati: Contains-Swarna Bhasma, Dhaniya, Yavakshar, Karpoor and Vidang as major ingredients. It balances tridoshas especially aggravated pitta. It has anti-inflammatory and analgesic properties due to which it reduces the burning micturation

Gokshuradi Guggulu: It contains gokshur, Suddha guggulu, trikatu and nagarmotha as main ingredients which has the properties like antibacterial and diuretic.

Bhrut Varunadi Kashya: It contains Varuna as main ingredient. Along with this it contains dhatki, gokshur, ikshu, yavakshar etc. as other ingredients. It balances kapha dosha and helps in sadaha, sarakta and sashoola mutra pravrutti.

Conclusion

Through various multi-centric trials conducted on large group there is a need to prove the efficacy of this non-invasive tool in managing such surgical conditions, including renal calculi. Viddhakarma plays a crucial role in hastening the therapeutic outcome of Shamana Chikitsa in Ayurveda. It can be concluded that Shamana Chikitsa added with Viddhakarma, can successfully treat surgical conditions like urolithiasis. This case showed the efficacy of a combination of Viddha Karma and Shamana Chikitsa to manage renal colic due to renal stone in a very non-invasive manner within a short duration without recurrence of any symptom."

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