

**CLINICAL STUDY TO EVALUATE THE EFFICACY OF YAVAKSHAR
IN MUTRASHMARI W.S.R. TO UROLITHIASIS – A CASE STUDY**

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Article Received on
27 April 2023,

Revised on 16 May 2023,
Accepted on 06 June 2023

DOI: 10.20959/wjpr202310-28587

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ABSTRACT

Mutrashmari is one of the commonest diseases of Mutravaha Srotas, Acharya Sushruta described it as one of the Ashta-Mahagadas and considered as “Yama” because it gives intolerable pain. Charaka mentioned Ashmari as one of Basti marmashritha Vyadhi. In modern science it is correlated with Urolithiasis. The incidence rate of Calculi varies as per geographical distribution, sex and age. Generally, men are more affected than women in the ratio of 3:1. The highest incidence of Urolithiasis occurs between the ages of 30-50 years. In Ayurveda various conservative medicine are mentioned for the management Mutrashmari with less side effect, easily available, cost effective and minimum recurrences of stone formation. In this case report 45 years male patient visited OPD of Kayachikitsa with complaint of abdominal pain (radiating pain from loin to groin) and burning micturation. The USG report showed one calculi measuring 6mm seen in the right kidney in lower pole calyx. The patient was treated with Yavakshara 250 mg twice a day for a period of 2 month. At the end of treatment patient got relief in signs and symptoms and USG report showed no evidence calculi in the kidneys.

KEYWORDS: Mutrashmari, Yavakshara, Renal calculi.

INTRODUCTION

In 21st century, human life has become so fast that one can define it as 'On Wheel Era'. Today's fastly developing world, man has to compete with a descent economical status. In order to achieve that, man has to adopt constantly busy & fast life style which has its own sequels like constant physical and mental stress. Imbalance food habits in terms of irregular timings, spicy and fast foods causing disturbed bowel habits, more use of vehicles and electronic devices causes lack of physical activity. These all are *pradnyaparadha*.^[1] According to Ayurveda, *pradnyaparadha* is the fundamental cause of vitiation of Doshas. Dosha will be vitiated if we could not follow the classically elaborated *Dinacharya*^[2] and *Rutucharya*.^[3] With all above mentioned factors excessive travelling, less water intake, suppression of natural urges (*Vegavrodha*)^[4], constantly sittingwork, hot climate, improper sleep pattern lead to formation of *Mutrashmari*. *Shareera* formed from *panchmahabhuta*.^[5] When *Aap Mahabhuta* decreases and *Prithvi Mahabhuta* increases, attains *Kathinyata* in *Mutravaha Strotasa* and produces the *Ashmari*. Urinary calculus is the third most common affliction of urinary tract. The symptoms of *Mutrashmari* are excruciating pain over nabhi, basti, sevani and medhra, pain aggravated during running, jumping, walking long distance etc., *Sarakt mutrapravrutti* (haematuria), *Vishirnadhara mutrapravrutti* (Obstructed flow of urine) are the symptoms of *Mutrashmari*.

Even though this disease is *kashtasadhya*^[6] to treat, all our *Acharyas* have clearly mentioned various types of treatment for the *Ashmari*. Due to busy & fast life people want to avoid hospitalization and also surgical intervention. They want quick therapies but it gives temporary relief which again disturb the equilibrium of health after short intervals. Today's ultramodern surgical culture have suggested different modalities according to size, location and complication of urinary calculi. These includes ESWL (Extracorporeal Shock Wave Lithotripsy), PCNL (Per Cutaneous Nephro Lithotomy), URS (Ureteroscopy), LASER (Light Amplification by Stimulated Emission of Radiation) all these having their own merits & demerits. They are costly and limited to particular group of affordable patient. Thus It is great need for society to search alternative medicine which is easy to consume, cost effective, easily available and with minimum adverse effect. In Ayurvedic classics there are plenty of medicine preparations referred in different forms for the treatment of *Mutrashmari*.

Acharya Sushruta said that before going for surgical procedures one should try with oral medicines like *Ghrita*, *Kashaya*, *Kshara* and *Uttarbasti*.^[7] *Kshara* has multiple properties

such as *Chhedana* (cutting / breaking), *Bhedana* (splitting), *Ropaa* (healing), *Lekhana* (scarification), *Shodhan*, *Tridoshaghana* and *Mutrala* (*diuretic*)^[8,9] as the properties to disintegration of the Urinary calculus. Hence in this present clinical study *Kshara* is selected for the management of *Mutrashmari*.

Hence we have decided to work on this burning problem of society. In present study *Yavakshara* is selected which is mentioned in *Rajnighantu* (*Pippalyadi varga*).

CASE REPORT

A 45 years old male patient visited the OPD of Dept. of *Kayachikitsa*, S.S.N.J. Rugnyalaya, Solapur on November 16,2021 (OPD No.-4057)with complaints of abdominal pain and it was found that the pain was intermittent and colicky in nature and which was radiating from loin to groin region and burning micturition since 15 days. So, patient consulted at *Kayachikitsa* OPD of S.S.N.J.Ayurved Hospital.

Table 1: showing Case report of subject.

Name	XYZ
Age	45 years
Sex	Male
OPD Registration no.	4057
Address	Padma nagar,solapur
Occupation	Professor
Marrital status	Married
Economic status	Middle class

Clinical Finding

The patient was visited to the OPD (OPD No.-4057) for further Ayurvedic management.

Table 2: Ashtavidh Pariksha.

1.	Nadi	78/min
2.	Mala	Prakrit
3.	Mutra	Prakrit
4.	Jivha	Niram
5.	Shabda	Prakrit
6.	Sparsha	Ruksha
7.	Drik	Prakrit
8.	Akriti	Madhyama

Table 3: Vital examination.

Blood pressure	130/80mmhg
Pulse	78/min
Respiratory rate	18/min
SPO2	98%

The patient had no significant past medical history as well as surgical history. The patient was well oriented to time, date and place. He was very calm and supportive during treatment.

MATERIALS AND METHODS

It is a single case study and the informed consent of the patient is taken in his own language.

Table showing 4: Chief complaint of subject.

Sr.No.	Chief Complaints (subjective criteria)	Grade	Duration
1.	Udarshool (Subjects complaining pain in the loin, which radiates round the flank to the groin and after into the testis or labium).	3+	15 days
2.	Sadah Mutrapravrutti (Burning micturition)	2+	15 days

History of present illness

According to the patient, he was asymptomatic 15 days before, and suddenly developed symptoms like Udarshool (Subjects complaining pain in the loin, which radiates round the flank to the groin and after into the testis or labium) and Sadah Mutrapravrutti (Burning micturition). As advised, patient underwent Ultrasonography of the abdomeno-pelvic region on 16-11-2021 and the report revealed that one calculi measuring 6mm seen in the right kidney in lower pole calyx. On the basis of Nidana and Rupa (Aetiology and clinical features) this clinical condition is diagnosed as Vatajashmari. As Sushruta explains, the Paneeya Kshara can be used in *Ashmari*. *Yavakshara* a unique combination described in *Rasatarangini*. *Yavakshara* is administered to patient with 250mg^[10] twice a day before food for a period of two month along with *pathya-apathya*.

Assessment Criteria

Subjective parameters are graded as Grade 0 to Grade 3.

A) *Udarshool* (Subjects complaining pain in the loin, which radiates round the flank to the groin and after into the testis or labium).

Visual Analogue Scale^[11]



0 1 2 3 4 5 6 7 8 9 10

And further it is assessed as follows

7 – 10 - Severe pain

4 – 6 - Moderate pain

1 – 3 - Mild pain

0 - no pain

VAS SCALE											
Assessment	0	1	2	3	4	5	6	7	8	9	10
BF											
AF											

b) *Sadah Mutrapravrutti* (Burning Micturation)^[12]

Sr.No.	Signs and Symptoms	GRADE
1.	No burning micturition	0
2.	Mild – starting of micturition	1
3.	Moderate – Tolerable burning at starting and during micturition	2
4.	Severe – Not Tolerable at starting ,during micturation and prologed for long time	3

RESULT

During his follow up after 3 week, his complaints of *udarshool* and *sadah Mutrapravrutti* were gradually reducing and patient was improving symptomatically. He was advised to repeat the USG after 2 months. USG report showed no evidence of renal calculi and also no clinical symptoms.

Table 5: showing Before and After assessment of patient.

SN	Symptoms	Before Treatment	After 3 week	After 2 month
1.	<i>Udarshool</i> (Subjects complaining pain in the loin, which radiates round the flank to the groin and after into the testis or labium).	3+	1+	–
2.	<i>Sadah Mutrapravrutti</i>	2+	–	–

Table 6: showing Probable mode of action or Samprapti Vigatana Samprapthi.

Samprapthi Ghatak	Mutrashmari	Yavakshara
Dosha	Tridosha	Tridoshagna
Dusha	Mutra	Mutrala
Agni	Jatharagni mandya	Deepana, Pachana
Ama	Jatharagni mandya Janya	Nirama
Srotas	Mutravaha srotas	Mutrala
Udbhava Sthana	Amashaya and Pakwashaya	Shoolaghna
Sanchara Sthana	Siras, Amashaya, Pakvashaya,	Mutrala

	Mutravaha Srotas	
Adhithana	Mutravaha Srotas and Basti	Mutrala
Vyakthasthana	Mutravaha Srotas and Basti	Mutrala
Dusti Prakara	Sanga	Chedana, Bhedana & Lekhana
Roga marga	Madhyama	Ashmari Bedhana
Vyadhi Swabhava	Mutra Apravrutti Janya	Mutra Pravruttkaraka
Sadyasadhyatha	Kruchra Sadhya, Shastra Sadhya	Sadya

WAVE
DIAGNOSTIC CENTRE

Shop No. 5, Ganesh Complex, Manik Chowk,
Opp. Ajoba Ganpati, Shukrawar Peth,
Solapur - 413 002 Tel. No. [REDACTED]

Dr. Rajnish Prabhakar Vatkar
MBBS, DMRE
Consultant Radiologist & Sonologist
Reg. No. 2010/05/1907

Patient Name: MR. ABHAY JADHAV Date: 16 Nov 2021
Referred By: Dr. PRASHANT LANDE (MD) Age: 45 YEARS Sex: M

ULTRASONOGRAPHY OF ABDOMEN & PELVIS

Liver is of normal size and shows raised parenchymal echo pattern. No focal lesion is seen. Portal vein is normal. CBD and IHBR are not dilated.

Gall bladder is well distended. No calculi are seen. Wall thickness is normal.

Spleen is normal in size. No focal lesion seen. Splenic vein is not dilated.

Pancreas is normal in size and echo pattern. No evidence of calcification or ductal dilatation. No peripancreatic fluid collection.

Both kidneys are of normal size and shape.
RK: 9.3 X 3.9 cm. LK: 9.9 X 5.3 cm.
Cortical echogenicity is normal. CMD is well maintained.
Right kidney shows calculus of size 6 mm in lower pole calyx.
No hydronephrosis or hydroureters.

No evidence of paraaortic or mesenteric lymphadenopathy.

No ascites.

Small and large bowel shows normal caliber and wall thickness.

Urinary bladder is well distended. Wall thickness is normal. No calculus seen.

Prostate is normal in size with normal echotexture. No focal lesion seen. Echotexture is homogenous.

Conclusion:

- Grade I fatty liver.
- Right kidney shows calculus of size 6 mm in lower pole calyx.

THANKS FOR REFERENCE.

DR. RAJNISH P. VATKAR
MBBS, DMRE, CONSULTANT RADIOLOGIST.

Before treatment

WAVE
DIAGNOSTIC CENTRE

Shop No. 5, Ganesh Complex, Manik Chowk,
Opp. Ajoba Ganpati, Shukrawar Peth,
Solapur - 413 002 Tel. No. [REDACTED]

Dr. Rajnish Prabhakar Vatkar
MBBS, DMRE
Consultant Radiologist & Sonologist
Reg. No. 2010/05/1907

Patient Name: MR. ABHAY JADHAV Date: 10 Jan 2022
Referred By: Dr. PRASHANT LANDE (M.D. Ayu.) Age: 45 YEARS Sex: M

ULTRASONOGRAPHY OF ABDOMEN & PELVIS

Liver is of normal size and shows raised parenchymal echo pattern. No focal lesion is seen. Portal vein is normal. CBD and IHBR are not dilated.

Gall bladder is well distended. No calculi are seen. Wall thickness is normal.

Spleen is normal in size. No focal lesion seen. Splenic vein is not dilated.

Pancreas is normal in size and echo pattern. No evidence of calcification or ductal dilatation. No peripancreatic fluid collection.

Both kidneys are of normal size and shape.
RK: 9.7 X 3.9 cm. LK: 9.7 X 5.2 cm.
Cortical echogenicity is normal. CMD is well maintained.
No evidence of renal calculi at present.
No hydronephrosis or hydroureters.

No evidence of paraaortic or mesenteric lymphadenopathy.

No ascites.

Small and large bowel shows normal caliber and wall thickness.

Urinary bladder is well distended. Wall thickness is normal. No calculus seen.

Prostate is normal in size with normal echotexture. No focal lesion seen. Echotexture is homogenous.

Conclusion:

- Grade I fatty liver.
- Rest No significant abnormality seen in USG abdomen and pelvis.

THANKS FOR REFERENCE.

DR. RAJNISH P. VATKAR
MBBS, DMRE, CONSULTANT RADIOLOGIST.

After treatment

According to Ayurved Point of view, It has properties such as Shodhana, Lekhana, Bhedhan, Pachana, and Tridoshagna.^[13] Yava is Sheet Veerya, which acts as an alkalizer. Further, as it is a Kshar it possesses alkaline properties. According to Acharya Charaka, all vyadhis are originated from agnimandya. As Yavakshar is having Deepana and Pachana properties, so it

stimulated the appetite and may relieve the indigestion. Because of its Bhedana (splitting) and Lekhana (scarification) properties it reduces kapha sanghata and thus breaks the urinary stones in small particles. Its sheeta veerya help in reducing daha (burning micturition). Snigdha guna of Yavakshara pacifies vatadosha which helps in reducing shool.

According to modern science, Yavakshar is a potent urinary alkalizer with mild diuretic activity. The synergetic action of alkalizer is enhanced and appreciating the results in disintegration and elimination of urinary stones from urinary tract. Alkaline property of Yavakshar helps in neutralizing acidic PH of urine and reduces irritation of bladder.^[14,15]

CONCLUSION

Correct use of therapeutic medications has significantly decreased the morbidity by its diuretic and lithotriptic action concerned with expulsion of stone. To decrease the risk of further stone formation, a patient is strictly advised to follow certain rules of conduct, diet and lifestyle regime to prevent reoccurrence. As this is a single case study, the same intervention can be used on larger population to see the efficacy of Yavakshar and role of Pathya in the management of Mutrashmari.

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