

A CASE STUDY TO EVALUATE THE EFFECT OF PUNARNAVA VARUN KWATHA IN THE MANAGEMENT OF MUTRASHMARI (UROLITHIASIS)

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ABSTRACT

Mankind has been suffering from urinary stones since from centuries. Urolithiasis is most common disorder of urinary tract and very common cause for pain in abdomen. The urinary stones have peculiar tendency of recurrence approximately 50% within 5yrs.^[1] *Aacharya Sushruta* has included *Mutrashamri* in “*Ashtamahagadas*”.^[2] The urinary stones have a peculiar tendency of recurrence, despite of their surgical removal. *Aacharya Sushruta* has advised both medicinal and surgical treatment for *Mutrashamri*.^[3] Looking into the gravity of problem this study is attempted to evaluate a role of *Punarnava varun kwath*^[4] in *Mutrashmari*. The need of the study is, as urolithiasis is multifactorial recurrent disease and now-a-days it is a common disease in society. It's prevalence rate is as high as 4% -20%.^[5] *Aacharya Sushruta* included *Mutrashmari* in “*Mahagada*” showing its severity. It is important to identify more efficacious drug with respect to cost, time, availability, palatability for the patient.

KEYWORDS: Urolithiasis, *Punarnava*, *Varun*, *Mutrashmari*, *Ayurveda*.

INTRODUCTION

Urolithiasis is a condition which involves the process of formation and retention of stones in kidney, bladder and/or urethra that result in renal colic, urine retention and pain in abdomen and flank.^[6] The cause of renal stones formation is still obscure but the factors like hyper excretion of relatively insoluble urinary constituents like calcium, oxalate, uric acid etc. physical changes in the urine, decreased urinary output of citrate, vitamine ‘A’ deficiency, urinary infection, urinary stasis are involved.^[7]

According to *Sushruta*, *Mutrashmari* is formed from the *Strotovaigunya* resulting from *dushit kapha* localised in *Basti* in conjunction with vitiated *Vata* and *Pitta*.^[8] According to *Aacharya Sushruta*, *Mutrashmari* is of four types viz. *Vataj*, *Pittaj*, *Kaphaj* and *shukraj Ashmari*.^[9]

Surgical treatment of urolithiasis described in modern medicine is PCNL & ESWL are more expensive & may cause some disadvantages. The urinary stones have a peculiar tendency of recurrence, despite of their surgical removal. Therefore, surgery is not a complete treatment is a part of treatment; hence there is need of alternative medicinal treatment.

Looking into the gravity of problem this study is attempted to evaluate a role of *Punarnava varun kwath*^[10] in *Mutrashmari*. In which *Punarnava* has *Mutravirechaniya* property.^[11] and *Varun* has *Ashmari bhedan*^[12] effect.

Case Report

Major complaints

A patient of 24yrs/male came to OPD of Govt. Ayurveda Hospital, Osmanabad with following complaints -

Pain in abdomen	since 2 months
Dysuria	since 1 and half month
Nausea and vomiting	since 10 days
Hematuria	often

H/O Past illness

Patient was asymptomatic before 2 months then he got started above complaints for which he took treatment from private hospitals but no relief was observed hence, came to GAH, Osmanabad for further management.

H/O of present illness

No H/o HTN, DM, IHD, COPD or any major illness.

There was no any specific medicinal and family history.

No H/o any surgical history found.

Personal history

Appetite - Moderate

Occupation - Farmer

Bowel habit - Regular

Micturition – Burning micturition, 2 times /day

Sleep – Disturbed

Diet – mixed

Water intake – 2 lit/day

Addiction – Chronic Tobacco chewer, Tea 3-4 times/day

Examinations

Pulse-70/ min

B.P- 110/70 mmHg

RS- Clear

CVS- S1S2 normal

CNS- Conscious and oriented

P/A- Soft, Tenderness at left lumbar, left iliac and hypogastric region.

Investigations

CBC – Hb - 15 gm%, TLC -5500/cu.mm, PLT -254000/cu.mm

BSL-R- 106 mg/dl, Urine Routine/microscopic – WNL

HbsAg – Non reactive, HIV 1&2 – Non reactive

MATERIAL AND METHODS

A patient was treated with *Punarnava varun kwatha* prepared by standard method of *kwatha* preparation and 40 ml *kwatha* given to patient before meal twice a day. Pt. is advised to follow the *pathyapathya*.

Method of drug preparation^[13]

Standard method for *kwatha* preparation was used where in one part of the selected drug was immersed in 16 parts of water and reduced to 1/8th portion after doing *agni sanskara*.

So, accordingly, 20gm of drug (*punarnava*, *varun* give in same quantity bharad of these dravya) was immersed in 320ml of water and reduced to 40ml i.e. 1/8th portion, by heating the mixture. This method was found to be most preferred in order to insure maximum active principle in the given dosage.

Properties of *punarnava varun kwatha*

Varun- Rasa: Tikta, Kashaya, Katu

Virya: Ushna

Vipaka: *Katu*

Guna: *Laghu and Ruksha*

Doshagnata: *Vataghna, Kaphaghna, Pittakar*

Prabhav:- *Ashmaribhedana, Raktadoshahar.*

Punarnava

Rasa – *Katu, Madhur, Tikta, Kashaya*

Virya – *Ushna*

Vipaka – *Katu*

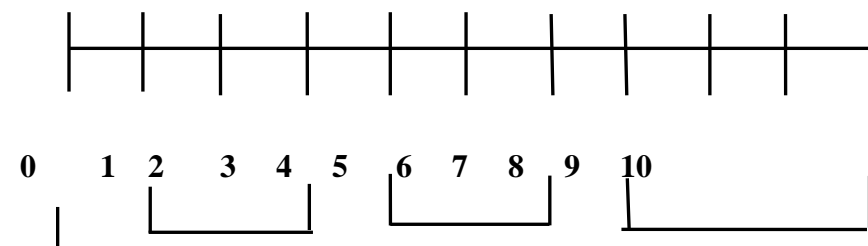
Guna – *Laghu, Ruksha, Khara*

Dose:– *Punarnava varun kwatha – 40ml twice a day.*

Subjective parameters

I) Pain in abdomen

VAS SCALE (VISUAL ANALOGUE SCALE)



No pain Mild Pain Moderate Pain Severe Pain

(Grade 0) (Grade I) (Grade II) (Grade III)

Sr. No	Grade	Symptoms
1.	0	Absence of pain VAS Score – 0
2.	I	Pain present but does not disturb routine (mild pain) VAS Score- upto 3
3.	II	Pain present which disturb routine (moderate pain) VAS Score – upto 6
4.	III	Patients rolls on bed due to pain (severe pain) VAS Score – more than 6 to 10

II) Dysuria

Sr. No	Grade	Symptoms
1.	0	Absence of pain during micturition
2.	I	Mild pain during micturition
3.	II	Moderate pain during micturition
4.	III	Severe pain during micturition

III) Hematuria

Sr. No	Grade	Symptoms
1.	0	Absence of RBC in urine
2.	I	Microscopic hematuria

IV) Nausea

Sr. No	Grade	Symptoms
1.	0	No nausea
2.	1	Nausea associated with food stuff
3.	2	Intermittent nausea
4.	3	Persistent nausea

V) Vomiting

Sr. No	Grade	Symptoms
1.	0	Absence of vomiting
2.	1	Mild vomiting 1 episode
3.	2	Reduced food intake 2-5 episodes
4.	3	Inadequate food and fluid intake more than 6 episodes

VI) Fever

Sr. No	Grade	Symptoms
1.	0	Absence of Fever
2.	1	Presence of fever

Objective parameters

Objective parameters taken under study are size of calculi and no. of calculi.

RESULT**Subjective Criteria**

Parameters	0 th day	15 th day	30 th day
Pain in abdomen	II	I	I
Hematuria	I	0	0
Dysuria	I	0	0
Nausea	I	0	0
Vomiting	I	I	0
Fever	0	0	0

Objective criteria

Parameters	0 th day	30 th day
No. of calculus	2	1
Size of calculus	8mm, 6mm	3.7 mm

DISCUSSION

- *Punarnava* having *madhura tikta kashaya rasa, katu vipaka, ushna virya and laghu ruksha guna* act as a *Mutravirechaniya*. As the active principle of *Punarnava* i.e. *Punarnavin*, a type of alkaloid in nature which shows its diuretic action on renal epithelium ultimately results as *mutravirechaniya*.
- As in *ashmari kapha* is predominant, here *Punarnava* by its *kapha vata hara* and *shothahara* property shows marvelous results.
- Because of *tikta, Kashaya, katu rasa, katu-vipak, ushna virya, laghu ruksha guna* and *ashmaribhedan prabhav Varun* shows *lithotriptic action* so useful in urinary calculi.
- The *varuna* is an effective antiseptic and diuretic so it is also useful in urinary diseases and infections.
- Collectively combination of these two shows action like anti inflammatory, analgesics, diuretic, lithotriptic; ultimately lesser chances of nidus formation as well as growth of stone. Because of its *ras guna guna virya vipaka* and *prabhava* it normalises vitiated *dosha* and act as *shothahara, ashmaribhedan and vedanahar*.

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Dr. Shripad Babruwan Balwade
M.B.B.S., D.M.R.E.
(Sonologist)

Pl's Name	Age / Sex	Ref. By	Date
	24 YEARS/M	DR. AYURVEDIC HOSPITAL	9/03/2020

USG ABDOMEN AND PELVIS

LIVER: Normal in size, shape & echogenicity. No focal lesion. Intrahepatic biliary radicles are not dilated. Portal vein & its branches and the hepatic veins show normal appearance. Common bile duct is normal.

GALL BLADDER: Adequate distended, normal.

SPLEEN: Normal in size, shape & shows homogenous echopattern. No focal lesion. Splenic vein is normal.

PANCREAS: Normal in size, shape & shows homogenous Echopattern. No focal lesion. Pancreatic duct is normal.


BOTH KIDNEYS: Right Kidney Normal in size, shape, axis & shows smooth concours. Echopattern is normal with good cortico-medullary differentiation. No e/o of any calculus.

Left kidney mid pole shows e/o 8mm of calculus at mid pole calyx and 6mm of calculus at lower pole calyx.

URINARY BLADDER: Minimal distended, increased wall thickness. No e/o of calculus noted. No e/o ascites/ lymphadenopathy.

IMPRESSION : LEFT RENAL CALCULUS.

Thanks for referral,
With regards


Dr. Shripad B Balwade
Consultant Radiologist & Sonologist

• 1.5T MRI • 16 Slice CT Scan • JANAI MRI & CT SCAN CENTER • Mammography • 300 MA Digital X-RAY
Deshmukh Anand, Darshan Nakh, Jiju Chavhan, Osmansabad, No. 5A G 97977

दुर्गाई निदान केंद्र DURGAI

USG ABDOMEN

Name	Age / Sex	Date
	24 Years/ Male	18/04/20

Ref By Dr. AYURVEDIC HOSPITAL

Liver Normal in size shows increased in echotexture noted s/o grade 1 fatty liver . No e/o focal lesion. No e/o dilated IIBR.

CBD and portal vein appear normal in course and caliber.

Gall bladder is normal in size. No e/o pericholic collection.

Spleen normal in size and shows normal homogenous echotexture. No e/o focal lesion. Splenic veins Normal

Pancreas: - Head & part of body visualized Normal in size with Normal in echotexture .No e/o peripancreatic collection noted. Excessive bowel gas.

Right Kidney Normal in size, shape and position. It shows normal corticomedullary differentiation with Normal in echotexture. No e/o hydronephrosis and hydroureter. No e/o of calculus noted.

Left Kidney normal in size, shape and position. E/o 3.7 mm calculus at mid pole calyx.


Aorta & IVC shows normal appearance.

Dilated edematous Bowell loops noted in abdomen & pelvis with gases and mid normal peristalsis noted . No e/o free fluid in abdomen and pelvis at present

Urinary bladder is distended with irregularities s/o cystitis. No E/o calculus noted

Prostat normal in size and Normal in echotexture.

IMPRESSION
LEFT RENAL CALCULUS.


Dr. DESHMUKH ANAND.
Consultant Radiologist.

CONCLUSION

- Oral administration of *punarnava varun kwatha* twice a day before meal is effective in the management of *Mutrashmari*.

- All symptoms of *Mutrashmari* i.e. pain in abdomen, nausea vomiting, dysuria can be successfully managed with above treatment.
- It is more efficacious treatment with respect to cost, time, availability, palatability for the patient.

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