

Etiopathological study of Mutra Ashmari and evaluation of efficacy of Shwadranshtadi Kwath in the management of Mutra Ashmari (Urolithiasis)

Jhariya M¹, Singh R², Vishwakarma N^{3*}

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¹ Monica Jhariya, Post Graduate Scholar, Department of Rog Nidan Evum Vikriti Vigyan, Pt Khushilal Sharma Government (Autonomous) Ayurveda College and Institute, Bhopal, Madhya Pradesh, India.

² Rita Singh, Reader and Head of Department, Department of Rog Nidan Evum Vikriti Vigyan, Pt Khushilal Sharma Government (Autonomous) Ayurveda College and Institute, Bhopal, Madhya Pradesh, India.

^{3*} Nidhi Vishwakarma, Post Graduate Scholar, Department of Rog Nidan Evum Vikriti Vigyan, Pt Khushilal Sharma Government (Autonomous) Ayurveda College and Institute, Bhopal, Madhya Pradesh, India.

Calculus formation in human body is very common in all ethnic groups around the world, which depends upon the geographical location and nature of dietetics. The most common site of calculus formation is gall bladder and kidney. In Ayurvedic classics clear and broad description of Mutrashmari is available under the umbrella of Mutravaha Srotas which means the presence of stone in urinary system i.e. Kidney, Ureter, Urinary Bladder, and Urethra. In this study, 40 patients who were having the signs, symptoms of Mutrashmari (urolithiasis) were registered from Pt. Khushilal Sharma Government Autonomous Ayurveda College and Institute, Bhopal, and randomly selected patients were kept in a group i.e. "Clinical Trial Group". The patients were advised for Shwadranshtadi Kwath in the dose of 30 ml with equal quantity of lukewarm water twice a day along with Nidana Parivarjan for duration of 90 days. Patients were advised to follow the dietetics as described in Ayurvedic classics.

Keywords: Calculus, Mutrashmari, Mutravaha Srotas, Shwadranshtadi Kwath

Corresponding Author	How to Cite this Article	To Browse
Nidhi Vishwakarma, Post Graduate Scholar, Department of Rog Nidan Evum Vikriti Vigyan, Pt Khushilal Sharma Government (Autonomous) Ayurveda College and Institute, Bhopal, Madhya Pradesh, India. Email: nidhi.vishwakarma007@gmail.com	Jhariya M, Singh R, Vishwakarma N, Etiopathological study of Mutra Ashmari and evaluation of efficacy of Shwadranshtadi Kwath in the management of Mutra Ashmari (Urolithiasis). J Ayu Int Med Sci. 2025;10(6):59-62. Available From https://jaims.in/jaims/article/view/4801/	

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Introduction

Renal stone disease is common, affecting individuals of all countries and ethnic groups. In UK, the prevalence is about 1.2%, with a lifetime risk of developing of a renal stone at age 60-70 of about 7% in men. In some regions, the risk is higher, most notably in countries like Saudi Arabia, where the life time risk of developing a renal stone in men aged 60-70 is just over 20%.^[1]

In ayurveda, the term *Mutrashmari* resembles with the disease Urolithiasis as described in modern medical science. It is characterized by *Nabhi Basti Sevni Mahti Vedana* (Pain in inguinal region), *Ayasat Atiruk* (Pain increase with jerks), *Mutra Daha* (Burning micturition), *Mutrakrichha* (Dysuria), *Muhu Mehta* (Increased frequency of micturition), *Visheernadhara* or *Mutra Vikiran* (Bifurcated stream of urine), *Mutra Dhara Sanga* (Interrupted stream of urine), *Avil Mutrata*, *Gomed Prakasham* (Turbid urination), *Sarudhir Mutrata* (Haematuria). Scientific description of *Ashmari* is available in *Sushruta Samhita*. The treatment of *Ashmari* is very difficult that is why it is called as Yama and it is considered as one of the *Mahagada* by Sushruta owing to its potentiality to disturb the urinary system as well as life of a person. The scientific description of its etiology, classification, symptomatology, pathology, complications along with its management are available in *Sushruta Samhita*.^[2]

In modern medical science, only surgery is only curative treatment of choice for *Mutrashmari* (Urolithiasis). In *Ayurveda*, drug having the properties of *Kapha Vata Shamak*, *Mutral*, *Ashmari Bhedak* are helpful in its management. In the context of *Ashmari Chikitsa*, *Shwadranshtadi Kwath* (B. R. 36/30) is herbal formulation described in *Bhaishajya Ratnavali*, which is a popular book of *Ayurvedic* formulations. It contains *Shwadranshta* {*Gokshura* (*Tribulus terrestris*)}, *Erand Patra* (*Ricinus communis*), *Nagar* (*Zingiber officinale*) and *Varuna Twak* (*Crataeva religiosa*).

In the view of above, present study "Etiopathological study of *Mutrashmari* and evaluation of efficacy of *Shwadranshtadi Kwath* in the management of *Mutrashmari* (Urolithiasis)" was planned with aim "To study the etiopathology of *Mutrashmari*" and "To evaluate the efficacy of *Shwadranshtadi Kwath* in the management of *Mutrashmari*".

Materials and Methods

In this study, 40 patients were having the signs, symptoms of *Mutrashmari* (urolithiasis) were registered from Pt. Khushilal Sharma Government Autonomous Ayurveda College and Institute, Bhopal, and randomly selected patients were kept in a group i.e. "Clinical Trial Group". The patients were advised for *Shwadranshtadi Kwath* in dose of 30 ml with equal quantity of lukewarm water twice a day along with *Nidana Parivarjan* for duration of 90 days. Patients were advised to follow dietetics as described in *Ayurvedic* classics. The Consent of patients was taken in prescribed consent format, designed by Institutional Ethics Committee (IEC) before starting therapy. The etiological study was carried in a special designed proforma incorporating various *Nidana* (etiological factors) described in *Ayurvedic* classics, dietetics and life style habits etc.

Drug Intervention

Shwadranshtadi Kwath (*Bhaishajya Ratnavali Ashmari Chikitsa* 36/30) has been used for management of the *Mutrashmari*.

Principle: Kwath Kalpana^[3]

Ingredients of *Shwadranshtadi Kwath* are given below:

1. *Shwadranshta* {*Gokshura* (*Tribulus terrestris*)} - 1part
2. *Erand Patra* (*Ricinus communis*) - 1 part
3. *Nagar* (*Zingiber officinale*) - 1 part
4. *Varun Twak* (*Crataeva religiosa*) - 1 part

Study Design

Regimen	Shwadranshtadi Kwath
Dose	30 ml twice daily with equal quantity of Luke warm water
Time of administration	Morning & Evening
Duration of therapy	03 Months
Follow-up	Every Month

Criteria for Diagnosis

Following diagnostic criteria were used for the diagnosis of patients.

1. Signs and symptoms of *Mutrashmari* (urolithiasis) as described in *Ayurvedic* classic as well as modern medical science viz.
 - *Nabhi Basti Sevni Mahti Vedana* (Pain in inguinal region)
 - *Ayasat Atiruk* (Pain increase with jerks)

- *Mutra Daha* (Burning micturition)
- *Mutrakrichha* (Dysuria)
- *Muhu Mehta* (Increased frequency of micturition)
- *Visheerna Dhara* or *Mutra Vikiran* (Bifurcated stream of urine)
- *Mutra Dhara Sanga* (Interrupted stream of urine)
- *Avil Mutrata Gomed Prakasham* (Turbid urination)
- *Sarudhir Mutrata* (Haematuria).

2. Ultra Sono Graphy (USG) – KUB Blood Urea
3. Serum Creatinine
4. Urine Routine & Microscopic

Criteria for Assessment

Grading Pattern for Cardinal Symptoms

Table 1: Vedana (Pain)

Criteria	Grade
No pain	0
Mild Pain	1
Moderate on movement	2
Severe on movement	3
Mild on rest	4
Moderate on rest	5
Severe on rest	6

Table 2: Mutradaha (Burning Micturition)

Criteria	Grade
No Burning micturition	0
Occasional Burning micturition do not require medication	1
Occasional Burning micturition but require medication	2
Severe constant Burning micturition but do not show relief even after medication	3

Table 3: Mutra Krichha (Dysuria)

Criteria	Grade
No dysuria	0
Occasional dysuria	1
Occasional dysuria which requires medication	2
Constant dysuria which requires medication	3
Severe constant dysuria but do not show relief even after medication	4

Table 4: Sparsh Asehyta (Tenderness)

Criteria	Grade
No tenderness	0
Mild tenderness	1
Moderate tenderness	2
Severe tenderness	3

Table 5: Stone Size

Criteria	Grade
0mm	0
0.1-4mm	1
4.1-7mm	2
7.1-10mm	3

Statistical Analysis

Statistical analysis was carried out using Wilcoxon test.

Observation and Results

Table 6: Effect of Therapy on Vedana (Pain)

Mean		MD	Percentage Relief	SD	SE	Wilcoxon test and P value
BT	AT					
3.342	1.211	2.132	63.79	0.8752	0.1420	W=741 P<0.0001

Table 7: Effect of Therapy on Mutra Daha (Burning Micturition)

Mean		MD	Percentage Relief	SD	SE	Wilcoxon test and P value
BT	AT					
1.263	0.4211	0.8421	66.67	0.6378	0.1035	W=378 P<0.0001

Table 8: Effect of Therapy on Mutra Krichha (Dysuria)

Mean		MD	Percentage Relief	SD	SE	Wilcoxon test and P value
BT	AT					
2.737	1.211	1.526	55.75	0.5569	0.09034	W=741 P<0.0001

Table 9: Effect of Therapy on Sparsha Asehyta (Tenderness)

Mean		MD	Percentage Relief	SD	SE	Wilcoxon test and P value
BT	AT					
2.368	0.8684	1.500	63.34	0.6040	0.09799	W=666 P<0.0001

Table 10: Effect of Therapy on Stone Size

Mean		MD	Percentage Relief	SD	SE	Wilcoxon test and P value
BT	AT					
2.368	1.105	1.263	53.33	0.6445	0.1045	W=595 P<0.0001

Table 11: Effect of Therapy on Serum Creatinine

Mean		MD	Percentage Relief	SD	SE	Wilcoxon test and P value
BT	AT					
1.059	0.9237	0.1355	-	0.1370	0.02223	W=300 P<0.0001

Table 12: Effect of Therapy on Blood Urea

Mean		MD	Percentage Relief	SD	SE	Wilcoxon test and P value
BT	AT					
14.087	13.361	0.7259	-	2.580	0.4186	W=190 P<0.0001

Table 13: Effect of Therapy on Cardinal Symptoms

Symptoms	Percentage
Vedana (Pain)	63.79
Mutra Daha (Burning Sensation)	66.67
Mutra Krichha (Dysuria)	55.75
Sparsh Ashetya	53.33

Table 14: Effect of Therapy on Stone Size

Stone size	Percentage relief
Stone size	53.33

Table 15: Overall Effect of Therapy

Result	No. of patients	Percentage of patients
No improvement (<25%)	0	0
Mild Improvement (25-<50%)	9	23.68
Moderate Improvement (50-<75%)	28	73.68
Marked Improvement (75-99%)	1	2.63
Complete remission (100%)	0	0

Discussion

Calculus formation in human body is very common in all ethnic groups around the world, which depends upon the geographical location and nature of dietetics. The most common site of calculus formation is gall bladder and kidney. The occurrence of kidney stone, which is very common and dependence on geographic locations, it varied greatly between ranging from 8% to 19% in males and from 3% to 5% in females in Western countries.

The etiology of *Mutrashmari* (Urolithiasis) is very much clear in Ayurvedic as well modern science literature. Poor dietary habits of a person can lead to the stone formation. All the above data indicates that all the patients of *Ashmari* were having faulty dietary patterns, inappropriate combination of different types of diet i.e., *Vairodhika Ahara* along with consumption of other etiological factors, which are responsible for formation of stone. Vitiating *Kapha* and *Vata Dosha* considered as chief etiological factors in the pathogenesis of *Mutrashmari* and results in emersion of *Mutrashmari* (Urolithiasis).

Conclusion

The results of this clinical study prove that *Shwadranshtadi Kwath*, an herbal compound is effective for the treatment of *Mutrashmari*. The effect of therapy was good and it is further suggested to the new researchers to study on *Mutrashmari* (Urolithiasis) in large sample size with some other herbal formulation along with *Shwadranshtadi Kwath* for better result and complete removal of the disease in short duration.

References

- Walker R, Colledge R, Ralston N, Davidson H. Davidson's principles and practice of medicine. 22nd ed. Edinburgh: Churchill Livingstone Elsevier; 2014. Chapter 17, p. 507 [Crossref][PubMed][Google Scholar]
- Shastri A, Kaviraj A, Sushruta M. Sushrut Samhita Ayurved Tatva Sandeepika Hindi Vyakhya Vaigyanik Vimarsha Sahita. Varanasi: Chaukhambha Publication; Reprint 2012. Nidana Sthana, Chapter 3, p. 311 [Crossref][PubMed][Google Scholar]
- Shrivastava S. Sharngadhara Samhita Acharya Gangadhara Virachita Jivanprada Savimarsha Hindi Vyakhya Sahita. 4th ed. Varanasi: Chaukhambha Publication; 2005. Madhyam Khanda, Chapter 2, p. 135 [Crossref][PubMed][Google Scholar]
- Kok DJ, Iestra JA, Doorenbos CJ, Papapoulos SE. The effects of dietary excesses in animal protein and in sodium on the composition and the crystallization kinetics of calcium oxalate monohydrate in urines of healthy men. J Clin Endocrinol Metab. 1990;71(4):861-7. [Crossref][PubMed][Google Scholar]
- Curhan GC, Willett WC, Rimm EB, Stampfer MJ. Family history and risk of kidney stones. J Am Soc Nephrol. 1997;8(10):1568-73. [Crossref][PubMed][Google Scholar]

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