



CASE STUDY

# Evaluate the Clinical Efficacy of *Gokshurapunarnavadi Yoga (Anubhuta)* In the Management of *Mutrashmari* – A Case Study

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## ABSTRACT

**Aim:** To Evaluate the clinical efficacy of *Gokshurapunarnavadi Yoga (Anubhuta)* in the management of *Mutrashmari* (Urolithiasis)

**Background:** Renal calculi is commonest disease of urinary system affecting 10-12% of the population. Which is caused by complex process of various physico-chemical events including saturation, super saturation, nucleation, growth aggregation and retention with the kidney. This disease is so terrible and hence considered as one of the 'Ashtamahaagaads' by Acharya Sushruta. Even though there is a considerable advancement made in the field of modern science but there is still need for a specific line of treatment which is noninvasive and inexpensive.

**Results and Discussion:** A case of pain in abdomen and vomiting, diagnosed with left renal calculus and right ureteric calculus was given *Gokshurapunarnavadi Yoga* treatment for a period of 4 weeks. Symptom of pain in abdomen, dysuria and vomiting subsided within a week. Repeat ultra-sonography was done after completion of treatment which discovered normal study.

**Key Words** Renal calculus, *Mutrashmari*, *Gokshurapunarnavadi Yoga*, Urolithiasis

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## INTRODUCTION

Acharya Sushruta, the father of surgery explained urinary calculus under the title of *Ashmari* in detail including etiological factors, classification, symptomatology, pathophysiology, complications and its management in a most scientific manner. This disease is dreadful and so, considered one of the 'Ashtamahaagaads' by Sushruta<sup>1</sup>, may be

owing to its capability to hamper the anatomy and physiology of urinary system.

Urinary stone one of the commonest disease in our India and pain due to kidney stones is more severe than labour pain. Among all the pain, abdominal pain always catches not only patient's attention but also the curiosity of the surgeon.



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In India, approximately 5-7 million patients suffer from stone disease and at least 1/1000 of Indian population require hospitalization due to kidney stone disease<sup>2,3</sup>. Thus, the disease is as wide spread as it is old, particularly in regions with dry, hot climate. These are known as “stone belt regions”. The prevalence of calculi varies as per geographical distribution, age and sex group. The recurrence rate is 50 to 80%. Males are significantly have higher ratio of disease than female and this ratio is 4:3.

The information regarding *Ashmari* is available almost in the all *Samhitas* (Ancient treatise) of *Ayurveda*<sup>4,5</sup>. The process of urinary stone formation is described by *Sushruta* as follows. The *Kapha Dosha* of person who neglects to cleanse (*Samsodhana*) the internal channels of his organs or is in the habit of taking undesirable and incompatible (*Apathyakari*) foods, enraged and aggravated by its own exciting causes and travel into the urinary bladder where it becomes saturated with the stone forming substances and gives rise to the formation of concretion or gravels to pass through the urine. So an exuberance of deranged *Kapha Dosha* should be taken in to consideration as the underlying cause of *Vrikkashmari*.

*Acharya Sushruta* described various medicines as well as surgical intervention for *Ashmari*. Medicinal treatment is advised to be undertaken in the early stages of the disease. Indication of surgical management has been suggested along with a note of caution regarding its complications<sup>6</sup>. Surgical intervention has to be undertaken only

on failure of conservative treatment and when death becomes inevitable as per *Acharya Sushruta*.

The prevalence and incidence of urolithiasis still is a major urinary problem seen in the society across the world. The epidemiology of this disease differs according to the geographic distribution of population in terms of prevalence, incidence, age, sex distribution, composition of stone and sites of stone etc. Now a day's everybody is in the state of rush. This in turns ends with irregular food habit, less intake of water, lots of perspiration which increases chances of getting stone. The consumption of food materials like milk (High in calcium), leafy vegetables, tomatoes (High in oxalate), non-veg food (High in protein content) like meat increases the incidence of renal calculus.

## CASE HISTORY

A 21 years old male patient came with complaints of bilateral flanks pain associated with the dysuria, vomiting, and anorexia since 4 weeks. Patient was asymptomatic before 4 weeks. Suddenly, one day he noticed severe pain in the bilateral flank regions and vomiting and mild fever. He consulted a nearby physician and got temporary relief from the complaints. Later he observed that pain in bilateral flanks, dysuria were continuing after few days and for which he approached at our hospital to find alternative therapy. According to the patient, bilateral flank pain was colicky in nature and intermittent. Dysuria felt by patient at the beginning and ending of micturition which is of



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pricking type in nature. There was a no history of Diabetes mellitus and Hypertension. Personal history reveals that, his food intake was irregular due to his stress full life style. His vitals were within normal range. On per abdomen examination, there was no sign of organomegaly but tenderness dragged up in the both sides of lumbar region and right side of renal angle. As advised patient underwent ultra-sonography of abdomino pelvic region on 30<sup>th</sup> may 2020 and the report revealed that “proximal mild hydronephrosis with hydroureter is noted upto mid

ureteric stone of size 10-11 mm in right kidney and 6 mm sized calculus is seen in lower pole of left kidney with no evidence of hydronephrosis.”

*Acharya sushruta* described various oral medications like *Ghrita*, *Taila*, *Paaniya Kshara* which possess properties such as *Bhedana* (splitting) and *Mutrala* (Diuretic) for promoting the disintegration of the urinary stone. *Gokshurapunarnavadi Churna* is an *Anubhut yoga* in the treatment of *Vrikkashmari*. Its contents, proportion and action are described in following Table 1,2,3.

**Table 1** Ingredients of *Gokshurapunarnavadi Yoga (Anubhut Yoga)*

No.	Drug	Botanical name	Part used	Proportion
1	<i>Gokshura</i>	<i>Tribulus terrestris</i>	<i>Phala</i>	2 part
2	<i>Punarnava</i>	<i>Bouhinia diffusa</i>	<i>Panchang</i>	2 part
3	<i>Hajrad al yahud</i>	Silicate of lime/ <i>Lapis judaicus</i>	<i>Bhasma</i>	½ part
4	<i>Pashanbhed</i>	<i>Bergenia siliate</i>	<i>Patra</i>	1 part
5	<i>Yavakshara</i>	Potassium carbonate	<i>Panchang</i>	½ part
6	<i>Kokilakshakshara</i>	<i>Asteracantha longifolia</i>	<i>Panchang</i>	1 part
7	<i>Svarjikakshara</i>	Sodium bicarbonate	<i>Panchang</i>	½ part
8	<i>Nimbukamla</i>	Acid citric	<i>Phala</i>	½ part

**Table 2** Rasa Panchaka & Dosha Karma of *Gokshurapunarnavadi Yoga*

No	Drug	Rasa	Guna	Virya	Vipaka	Doshaghata
1	<i>Gokshura</i>	<i>Madhura</i>	<i>Guru, Snigdha</i>	<i>Shita</i>	<i>Madhura</i>	<i>MootraVirechaniya</i>
2	<i>Punarnava</i>	<i>Madhura, Tikta, Kashaya</i>	<i>Laghu, Ruksha</i>	<i>Ushna, Laghu, Ruksha</i>	<i>Madhura</i>	<i>MootraVirechaniya</i>
3	<i>Hajrad al yahud</i>			<i>Shita</i>		<i>Ashmarishoolnashak, Mootrashmaribhedak</i>
4	<i>Pashanbhed</i>	<i>Kashaya, Tikta</i>	<i>Laghu, Snigdha, Tikshna</i>	<i>Shita</i>	<i>Katu</i>	<i>Ashmaribhedana</i>
5	<i>Yavakshara</i>	<i>Katu</i>	<i>Laghu, Snigdha, Sukshma, Sara</i>	<i>Shita</i>	<i>Katu</i>	<i>Chhedana, Bhedana, Lekhana, Tridoshagnatva</i>
6	<i>Kokilakshakshara</i>	<i>Tikta</i>	<i>Guru, Snigdha</i>	<i>Shita</i>	<i>Madhura</i>	<i>Vatapitashamaka</i>
7	<i>Svarjikakshara</i>	<i>Katu</i>	<i>Laghu, Ruksha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Vatakaphashamaka</i>
8	<i>Nimbukamla</i>	<i>Amla</i>	<i>Laghu</i>	<i>Ushna</i>	<i>Amla</i>	<i>Mutrala</i>

*Gokshurapunarnavadi yoga* is given in *Churna* form, dose 5gm through oral route for the duration of four weeks in twice a day with coconut water.

Patient was asked to follow prescribed wholesome diet and activity chart. (Table 5)

After his first follow up, it was observed that all clinical features were absent except abdominal



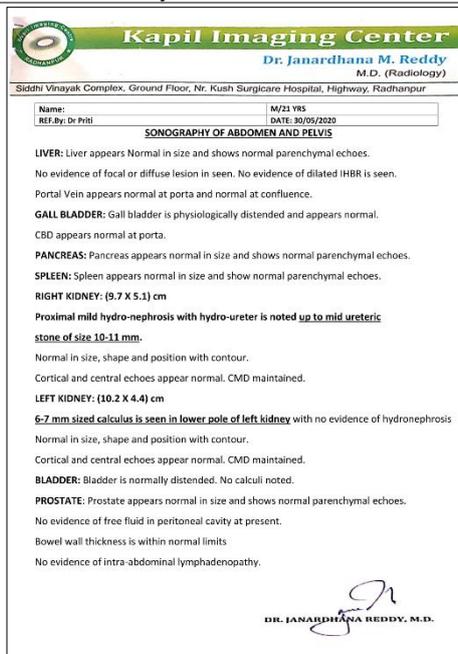
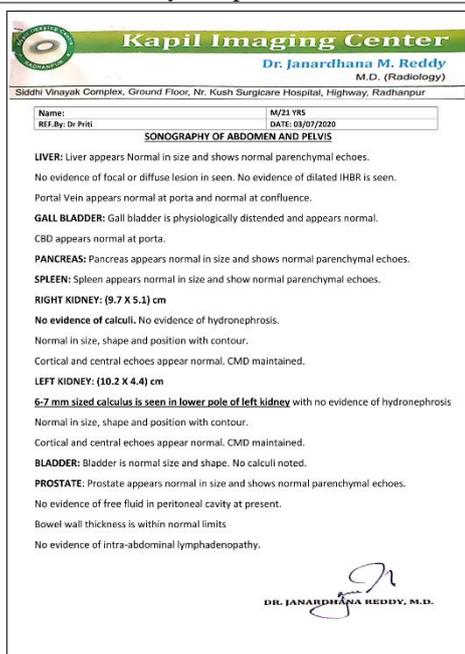
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**Table 3** Pharmacological Action of Gokshurapunarnavadi Yoga

No.	Drug	Pharmacological action
1	Gokshura	Mutrala, Vrishya, Brimhana, Ashmarihara, Bastishodhana
2	Punarnava	Anulomana, Shothahara, Mutrala
3	Hajrad al yahud	Vamanaghna, Vrikkshoolanashaka, Vrikkashmarihar, Mutrala
4	Pashanbhed	Bhedana, Bastishodhana, Ashmarighna, Mutravirechaniya
5	Yavakshara	Chhedana, Bhedana, Lekhana, Tridoshagnatva
6	Kokilakshakshara	Mutrala, Mutrakrchra, Ashmarihara, Bastishodhana
7	Svarjikakshara	Shoolahara, mutrakrichra, Ashmaribhedana
8	Nimbukamla	Mutrala

**Table 4** USG Report

Scanning Date	Clinical features	Impression
30/05/2020	bilateral flanks pain, dysuria, vomiting, anorexia, mild fever.	proximal mild hydronephrosis with hydroureter is noted upto mid ureteric stone of size 10-11 mm in right kidney and 6 mm sized calculus is seen in lower pole of left kidney with no evidence of hydronephrosis.”
03/07/2020	Mild abdominal pain	single calculi measuring 6 mm in lower pole of left kidney
07/10/2020	No any complaints	Normal study



**Table 5** Pathyapathya Chart

Ahara (Food habit)	Pathya (Wholesome)	Apathya (Unwholesome)
<b>Vegetables</b>	Carrots, Bitter Gourd, Radish, Pumpkin	Brinjal, Beans, Lady finger, Capsicum, Tomato, Cucumber, Spinach, Peas,
<b>Cereals</b>	Horsegram, Barley, Moong Dal	Fine wheat flour, Oat meal, Bran
<b>Fruits</b>	Bananas, Lemon, Apple, Almonds, Apricots, Plums	Kiwi, Strawberries, Chickoo,
<b>Miscellaneous</b>	Coconut water, Lemonade, Butter milk	Coffee, Cashew nuts, Chocolates
<b>Vihara (Activities)</b>	Regular exercises	Day sleep, Suppression of Natural urges, Sweating

**Table 6** Samprapti ghataka

Samprapti ghataka	Mutrashmari	Gokshurapunarnavadi Yoga
Dosha	Tridosha	Tridoshaghna



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<i>Dushya</i>	<i>Mutra</i>	<i>Mutrala</i>
<i>Agni</i>	<i>Jatharagni mandhya</i>	<i>Deepana, Pachana</i>
<i>Ama</i>	<i>Jatharagnimandhya janya</i>	<i>Nirama</i>
<i>Srotas</i>	<i>Mutravaha srotas</i>	<i>Mutrala</i>
<i>Udbhava sthana</i>	<i>Amashaya and Pakvashaya</i>	<i>shoolaghna</i>
<i>Sanchara sthana</i>	<i>Siras, amapakvashayagat Mutravaha srotas</i>	<i>Mutrala</i>
<i>Adhithana</i>	<i>Mutravaha srotas and Basti</i>	<i>Mutrala</i>
<i>Vyakta sthana</i>	<i>Mutravaha srotas and Basti</i>	<i>Mutrala</i>
<i>Dusti prakara</i>	<i>Sanga</i>	<i>Sodhana, Bhedana, Anulomana</i>
<i>Rogamarga</i>	<i>Madhyama</i>	<i>Ashmari bhedana</i>
<i>Vyadhi swabhava</i>	<i>Mutra apravruttijanya vihara</i>	<i>Mutra pravruttikara</i>
<i>Sadyasadyata</i>	<i>Kruchhra, Sastrasadhya</i>	<i>Sadhya</i>

pain and intensity of pain is less. Sudden onset of burning micturation and mild haematuria was felt by patient and expulsion of stone was noticed by him during this episode. He was advised to repeat ultra-sonography of abdomen and pelvis on date 3<sup>rd</sup> July,2020. Reports suggest that “there was single calculi measuring 6 mm in lower pole of left kidney”. (Table 4) Patient was asked to follow same treatment with *Pathyapathya* chart. He was advised to review after 3 months with scan report. Patient had come for follow up on 7<sup>th</sup> October 2020, stating that he got completely relieved from abdominal pain and has experienced neither dysuria nor haematuria till date. Impression of 3<sup>rd</sup> scan report confirmed that, there is no absolute calculus in the urinary tract.

## DISCUSSION

*Hajrul Yahood Bhasma* has lithontriptic and diuretic action in the body, which helps dissolving and pushing the kidney stone along the course of the ureter. The most important thing is that it also has anodyne action, which absolutely reduces renal colic within first 2 to 3 dosages<sup>7</sup>. *Kokilaksha* has potential of diuretic activity, anti-

inflammatory activity, anti-pyretic activity and analgesic activity<sup>8</sup>. *Gokshura* contains potassium nitrate in rich quantity which acts as an alkalizer<sup>9</sup>. When *Gokshura* is combined with *Yava kshara* and *Sarjika kshara*, synergetic action of alkalizer is enhanced and appreciating the result in disintegration and elimination of the urinary stone from urinary tract.

## CONCLUSION

The present case study proves the combine action of *Gokshurapunarnavadi Yoga* in treating a case of *Mutrashmari* (Urolithiasis). Further studies should be done in more such cases to strengthen and validate the combine action of Ayurveda drug compounds.



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