



ANALGESIC EFFECT OF BHRAHMI KSHEERPAKA IN THE MANAGEMENT OF URETERIC COLIC-A CASE STUDY

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Abstract:

Ureterolithiasis, also known as ureteric calculi, is the formation or presence of stones in the ureters, which are the tubes that convey urine from the kidneys to the bladder. The bulk of these stones, or around 80% of them, are found to be mostly composed of calcium. Comparatively, 15% of these ureter stones are struvite, a magnesium ammonium phosphate compound made by urea-splitting gram-negative bacteria. It is discovered that the majority of these stones, or around 80% of them, are mostly made of calcium. Comparatively, struvite, a magnesium ammonium phosphate substance produced by urea-splitting gram-negative bacteria, makes up around 15% of these ureter stones. Uric acid stones make up a lesser portion of these ureter stones, and cysteine is present in even fewer of them¹. In *ayurveda* there are many drugs and formulation that are especially effective in the management for the urolithiasis and renal and ureteric colic. Acharya shushrut is called as father of surgery. He performed surgeries for many diseases like piles, fissure in ano, fistula in ano, different abdominal surgeries in udarrogas and also in the urolithiasis. But he also gave different types of drugs for pain management and especially in the post operative pain management. In the *shushrut Samhita chikitsa sthan* 7th chap he explained about the surgery for urolithiasis and gave some drugs for pain management. In that he mentioned *kapotvank(bhrahmi)*. And in this era pain management is growing very popular as most of the people want relief from the pain soon and that have minimal side effects of the medicine. So, we all need that kind of medicine that have minimal side effects and have quick in action.

keywords: Urolithiasis, Ureteric Colic, *Brahmi*, *Kapotvank*, *Shushrut*, *Ksheerpaka*, Analgesic

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1. Introduction

Colicky abdominal discomfort is a pretty common occurrence. Numerous surgical problems exist, such as stomach pains, hepato-colicky, and urinary calculus. Any discomfort you have between your chest and groin is considered abdominal pain. This is frequently known as belly, or the area of the stomach. Main differential diagnosis of abdominal pain could be urinary calculus, appendicitis, Cholecystitis, Bowel obstruction, Pancreatitis, Chronic functional abdominal pain, Constipation. Most of the pain can be referred as Spasmodic pain as there is Smooth muscle spasm is there, because of that there is pain in abdomen is seen in many pains as there are many conditions in which it can happen.

In *Ayurveda* there is no specific word for spasmodic pain but there is explained *Shula*, where particularly abdominal pain is considered. One condition is also very painful and should not be ignored is that is renal colic pain, in renal colicky pain it is said there is *yama* (God of death) like *pida* (pain) occurs during renal colicky on that time only one thing came into our mind to relieve the pain and for that many pain killers and antispasmodic drugs are used in modern science from oral, intravenous, intramuscular etc.

Now a days many people are asking for pain killer medicines for very less side effects and complications especially the cases of Chronic Kidney Disease many painkillers' medicines are contraindicated, and many patients with Chronic Kidney Disease have urinary calculus. Urinary calculi may have been around as long as 7000 years ago, according to anthropological history. A frequent ecological illness called nephrolithiasis causes over 2,000 000 hospital admissions annually in the USA alone. In India, 5 out of every 1000 people get a renal colic crisis. Male to female ratio is 2:1. The illness often reaches its climax between the ages of 30 and 40.

CASE REPORT

Personal history:

- Name of the patient - XYZ
- Age - 32 years
- Gender - Male
- Occupation – IT Worker

Chief complaints with duration:

Radiating pain from right loin to groin region in the last 5 days

Mild nausea and vomiting in past 2 days

H/O present illness:

Patient who is IT Worker by profession approached to OPD of our hospital with chief complaints of right-side radiating pain from loin to groin. Patient took treatment for the same in modern hospital. There was significant relief after taking analgesics. But after taking it the symptoms were presents till the effect of analgesic drugs after sometimes pain was there. Hence patient came to Ayurvedic hospital for the treatment of the same.

Past history:

No any history of diabetes mellitus and Hypertension. Patient have addiction of alcohol in the last 2 years.

Family history: Not Any Family History.

Personal history:

- Food habits: non-veg, spicy, and salty food; Ruksha Ahar (poha, bread, and toast).
- Lifestyle: Insufficient water intake, sedentary lifestyle, and suppression of natural urges.
- Sleep: Disturbed due to pain and family stress.
- Addiction: Alcohol occasionally once in a month

General examination:

- Blood Pressure - 126/82 mm hg
- Pulse - 90/Min
- Temperature – 98⁰F
- Cardio Vascular system - S1 S2 Normal, Heard
- Respiratory System - Air Entry Bilaterally Equally Clear
- Digestive System – Appetite Normal
- Bowel - Normal
- Urogenital System - Normal, Mild Burning Micturition.

Local examination: no any significant abnormality was found.

Investigations:

On Laboratory Investigations
Routine Haematological Tests Shown
Hb – 12gm%,

TLC – 8000 Cu/Mm, DLC – P – 45%, L – 30%,
 E+M – 2%,
 BSL (Random) – 110mg/Dl,
 Triple H – Negative
 Serum Creatinine-0.7 Mg/Dl
 Urine Routine and Micro-No Any Significant Values Found
 USG -Right Sided 6.6 Mm Upper Ureteric Stone, PUJ Measuring 18 To 20 Mm, Mild Hydronephrosis Is Present.
 Blood Culture and Sensitivity-No Organism Found

Evaluation for diagnosis:

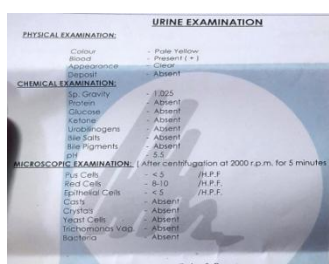
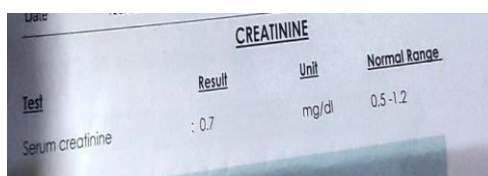
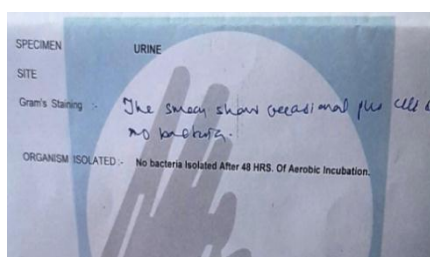
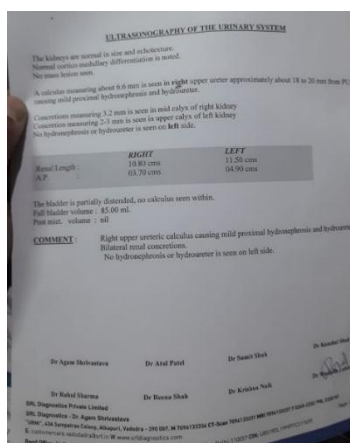
Patient was having radiating left side pain from lion to groin and with the USG it was confirmed that it is urolithiasis.

Hetu were non-vegetarian, spicy, and salty food; *Ruksha ahara* (like Poha, bread and

toast), insufficient water intake, sedentary lifestyle and suppression of natural urges.

Purvaroop were abdominal distension, indigestion, and burning micturition. Roopa was experiencing stomach ache, burning while urinating, and agony.

Samprapti was a contributing component that vitiated the Vata and Kapha doshas in Mutravaha strotas, which resulted in the creation of Ashmari. Ashmari's Samavayi karana for the kapha dosha. Ashmari emerges when the dominant Kapha dosha becomes hard. Due to Apana vayudushti, Mala is not entirely eliminated from the body, and the reduction in urine volume brought on by the saturation of Kapha dosha in urine causes the build-up of these Mala in the body and the beginning of sickness. Ashmari was the Vyaktavastha.



Details of procedure:

Patient is given *bhrahmi churna* and for *kheerapak* Kalpana he is explained about the preparation of the *bhrahmi ksheerpaka*. He is asked to take 5 gm of *bhrahmi churna* and 40 ml milk and 160 ml water and reduced to only

milk, that mixture is sieved and then administrated through oral route for 2 times per day for 7 days. Assessment of the pain was done every day.

2. Materials:

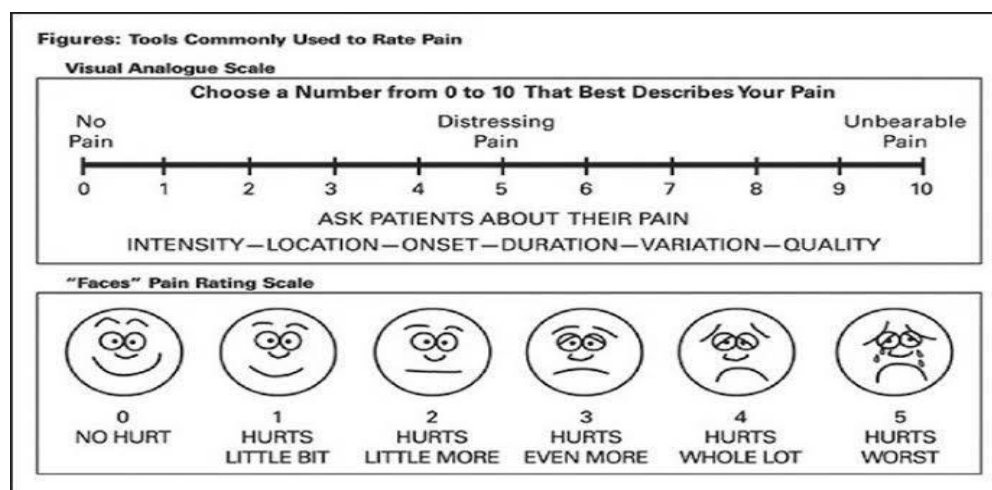
Sr No	Dravya	Latin Name	Virya	Guna	Karma	Part Used	Quantity
1	<i>Bhrahmi</i>	<i>Bacopa monnieri</i> Linn.	<i>Shita</i>	Kaphapittahara	Medhya, Rasayana, apasmarhara sothahara ⁱⁱ	Whole Plant	5g
2	Cow milk	-	shita	Shit,snigdha,ladhu	Medhya,rasayan, Shramhara, bhruhan	-	40ml
3	water	-	shita	Snigda, shit,	Shramhara, pipasahar	-	160ml

Treatment:

- Firstly, informed written consent was taken.
- Gave *bhrahmi kheerpaka* for 7 days daily 2 times after meal.
- Daily assessment was done.
- By Vas scale daily assessment of pain was done.

Observations of subjective parameters:

day	Vas scale
1 st	5
2 nd	2
3 rd	4
4 th	3
5 th	3
6 th	2
7 th	1



3. Discussion:

Even though ayurveda has potent lithotriptic drugs but the potent antispasmodic and analgesic effect that are less explored. This study is intended to explore such drugs for the interest of abdominal colicky pain. In *Mootrashmari* chikitsa, such drug is mentioned especially for pain, in the name of kapotvank.

In every abdominal condition there is colicky pain as there is no any effective herbal medicine available in market for effective analgesic and antispasmodic drugs, so having these effects in bhrahmi it will be good remedy for abdominal colicky pain. Not only as an oral medication but we can also make alcoholic extract of the bhrahmi and can use that as an injection for intra muscular uses, there are animal models are ready for such studies, and after the successful animal trials we can also use that as an injection for intramuscular use. That can be a revolutionary for the ayurveda science as there are no other ayurvedic injections are available for the such cases.

As we know that allopathic analgesic and pain killer medications have many side effects, many drugs are nephrotoxic and hepatotoxic in nature and can affect the kidney at great level, there are many patients come at the emergency department with the renal failure as they are taking pain killer since many times. We should aware such patients or try some alternative for pain killer that are not harmful to our body or less harmful to our body.

Bhrahmi is very much versatile medication as mentions its properties and effects of the bhrahmi, it also effective for mind to induce sleep also as we know in ureteric colic patient night time is the time for the more pain to occur so not only it will cause the sleep so patient can sleep properly but also because of the antispasmodic effect and analgesic effect it will reduce the pain and patient can have a nice good night sleep.

Many doctors and practitioner are using yoga and many drug combinations for treatment of the diseases but I think a doctor should use minimal drug and should achieve his goal with different sanskaras and nidan parivarjan, that doctor can make many milestones and patient can be more devoted and he will feel good about the small amount of the medicine he or she need

to take so *bhrami ksheerpaka* is also easy to make and patient just need to take milk so he will feel good and can take it without hesitation and it will be more effective because of the good mental state.

Probable mode of action of bhrahmi ksheerpaka:

कपोतवङ्कामूलं वा पिबेदम्लैः सुरादिभिः |

तत्सिद्धं वा पिबेत् क्षीरं वेदनाभिरुपद्रुतः ||२५|| (*Sushurt chikitsa chap 7/25*)

In the making of *ksheerpaka*, milk and water are cooked with medicinal herbs. Extracts from medicinal plants are dissolved in milk. Together, the medicinal plant's properties and those of milk can both treat and prevent disease. For the most part, *Godudha* is used to make *ksheerpaka*. There are few preparations that use *Aja dugdha*.⁴⁰ making *ksheerpaka* 32 parts water, 8 parts milk, and 1-part *aushadhi dravya* are utilised. The mixture is heated until just milk is left.

Bhrahmi, also known as *jalanimba* or little creeper, is a plant that grows mostly in hot climates. Bacosides A and B are the main ingredients, while phytochemical research have revealed that it also includes nicotine, alkaloids, saponins, and bacosides A through F. In the native medical system, the plant is utilised to treat cardiac, respiratory, and neuropharmacological diseases such stress, sleeplessness, insanity, sadness, anxiety, and psychosis. Additionally, it has qualities that are astringent, bitter, cooling, anti-diarrheal, anti-inflammatory, anticancer, antipyretic, spasmolytic, antirheumatic, analgesic, and anti-ulcer. Because of the anti-spasmodic effect and anti-inflammatory and analgesic effect we can assume that I can relieve the colic pain in the urolithiasis patients.

4. Conclusion:

From above all the observations and discussion we can say that bhrahmi ksheerpaka is effective in the ureteric colic in the urolithiasis patients and it have zero side effects it is very cost effective, healthy, easy to make, and the patient himself is feeling good after taking medication and relief from the pain. One thing he complained about is little indigestion. But that was treated accordingly.

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