



Ayurvedic Management of Mutrashmari(Renal Calculi) in children with special reference to Ultrasonography- A Single Case Study.

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ABSTRACT:- Ashmari is one of the most common diseases of Mutravaha Srotas (Urinary System). Mutrashmari (Renal Calculi) is one among the Ashtamahagada (eight fatal conditions). It possesses symptoms such as Udarashoola(Discomfort & Pain in the abdomen), Aruchi (loss of appetite) , Mutrakriccha (burning micturition) , Mushka Vedana (Pain in the testicles) and Shepha Vedana (Pain in the penis) have been in Ayurvedic Samhitas.

A 8 years old male patient visited OPD, with complaints of pain in both the right & left side of the Abdomen, Burning Micturation, Loss of appetite. The Ultrasound scan of the abdomen revealed that renal calculi measuring right kidney shows 4mm calculus in mid calyx & 3mm-2.5 mm two calculi in lower calyx. Left kidney shows 2.5 mm calculus in mid calyx and 4mm-4mm two calculi in lower calyx with the normal functioning of vitals. The patient was treated with only Shamana ausadhas (oral drugs) without any Shodhana Chikitsa. A salient improvement is seen in a span of 2 months. Along with medications, the patient was also advised to follow Pathyapathya. The patient got relief from complained sign & symptoms & the USG report showed calculi from both side of the kidneys expelled out. This single Case study intends to instill confidence among Ayurvedicians for the management of Mutrashmari (Renal calculi) only by Ayurvedic formulations without any surgical procedure and being cost effective.

Keywords: Ayurveda, Asthamahagada, Mutraashmari, Renal calculi, Salient, Shamana ausadhas.

Introduction:

Mutrashmari (Renal calculi) is one of the common and most distressing disease. It

is one among the Ashtamahagada (eight fatal conditions).It is kapha predominance tridosaja vyadhi¹. According to the clinical features in modern, it can be correlated with Renal Calculi (Urolithiasis) which means formation of stone in the urinary tract.

Urolithiasis or Renal calculi are one of the most common problem due to changing diet & lifestyle. Urolithiasis is a consequence of complex physiochemical process, which involves sequence of events in the formation of any urinary stone including urinary saturation, growth of crystals, retention of crystal & finally formation of urinary stone². Like adult, most of the children suffers from urinary stone at any age. According to Prevalence, 2-3% of children are affected with renal calculi³. Many treatment methods have been embraced in modern medical field to cure the disease but it is quite costly & behind this recurrence of stone formation cannot be neglected. Acharya Sushruta said that before going for surgical process one should try with oral medications which contains the properties such as diuretic, breaking, cutting, splitting, which helps to expel out the urinary stones⁴. Hence, in this single study, ayurvedic oral medications were selected for the management of Mutrashmari.

Case Report:

A 8 years old male patient brought by his father to our Kaumarbhritya OPD No-6 with chief complaints of spasmodic pain on both sides of the abdomen, burning micturition, poor appetite. After interrogation, it was found that he had same history 10 days back for which his father brought analgesic tablet from medical store. But after 7 days, abdominal pain started again. So, he came to Shri O.H Nazar Ayurvedic hospital with his father for Ayurvedic treatment.

Note: After taking personal history, it was revealed that patient's family came from bihar state to Gujarat & they has been consuming tube well water from last 1 year (these could be considered as the main offending factors).

General Examination: The general condition of the patient was good and vital signs were normal. He was moderately built & nourished. Patient's weight- 21.2 kg & height – 126 cm. His appetite was poor, bowel habit was regular & bladder habit was regular with burning sensation. Sleep was disturbed sometimes due to pain.

Clinical Examination:

Per Abdomen Examination- Elicited tenderness on the right & left lumber region of the abdomen.

No other Abnormality detected during the general & Systemic examination.

Radiological investigation (USG Report before treatment):-

(Date- 18/5/2023) Both Kidneys appear normal in size, shape, position.

Right Kidney shows 4mm calculus in mid calyx & 2.5 mm two calculi in lower calyx. Left kidney shows 2.5 mm calculus in mid calyx & 4mm two calculi in lower calyx.

Few small mesenteric lymph nodes are seen with intact hilum, largest 6x5 mm.

Diagnosis:- Clinical features along with Ultrasound scan report suggests that it is a case of Mutrashmari (Renal calculi).

Table No 1: Treatment Schedule:-

S.No	Treatment	Drug of Choice	Duration
	Shamana Chikitsa	1. Chandraprabha Vati 1 tablet twice a daily after meal. 2. Gokshuradi Guggula 1 tablet twice a day daily after meal. 3. Ashmarihar kwath 5ml twice a day after meal. 4. Neeri Syrup 5 ml twice a day after meal.	The patient was advised to follow up initially after 7 days & later after every 15th day on OPD basis. Total duration of treatment-2 months.

Table No. 2: Pathyapathya (Wholesome & Unwholesome diet) Chart Along with oral medicines:

S No	Aharaja vargas (Food Habits)	Pathyas (Do's)	Apathyas (Don't)
1.	Vegetables	Carrots, bitter guard, Potatoes, Radish & Pumkin.	Brinjal, Beans, Ladyfinger, Capsicum, Tomato, Cucumber, Spinach.
2.	Fruits	Bananas, Lemon, Apple	Black grapes, Kiwi, Strawberries
3.	Healthy food for Kidneys	Coconut water, Butter milk, Papaya, Garlic, Yogurt	Kidney beans, Mushroom, Cauliflower, Peas.
4.	Viharaja (Activities)	Regular exercise, Playful	Day sleep, Controlling Natural urges, Excessive sweating.

Result: After taking regular medicine along with advised diet chart for 2 months, from the last USG patient came for follow up. He has moderately relief in pain abdomen, burning micturition & appetite is also improving. The patient was advised to repeat USG after 2 months.

Radiological investigation (USG Report after treatment):-

(Date- 21/7/2023) Both Kidneys appear normal in size, shape, position.

Right kidney shows no any renal calculi.

Left Kidney shows no any renal calculi.

Urinary bladder distended normal, no calculus, cystis noted. No ascites or pelvic lymphadenopathy seen.

Discussion:-

According to Ayurveda, "Ashmari" is a aggregation of Kaphapradhanadosha in Mutravaha srotas due to Agnimandya & Ama formation⁵. The process of Ashmari formation takes place by the stagnation and supersaturation of the urine and by crystallization of the crystalloids within the urine⁶. In this case study, based on the sign & symptoms, it was diagnosed as Mutrashmari. Hence, in this condition, Polyherbal formulations were advised.

Chandraprabha Vati:- It is a herbomineral formulation indicated in Mutrakriccha (Dysuria), Ashmari (Urinary or Renal calculi) and found to be safe for renal function⁷. Its ingredients acts as anti-inflammatory, antiseptic, diuretic and recommended in urinary tract infection.

Gokshuradi Guggula:- Gokshura has Ashmari nashan (lithotriptic) & Mutrala (diuretic) properties. Diuretic activity of Gokshura has been confirmed in several experimental studies⁸. It contains potassium nitrate in rich quantity which acts as alkalizer & thus helps to prevent urinary stones⁹. It may increase the absorption of important nutrients and improves digestion by stimulating the release of digestive juices¹⁰. Guggulu has Vatashamaka, Ashmari bhedana & Mutrala properties. The ingredients of Gokshuradi guggulu helps in relieving pain, inflammation and also by its lekhana (scraping) action, it is helpful in removing the stone.

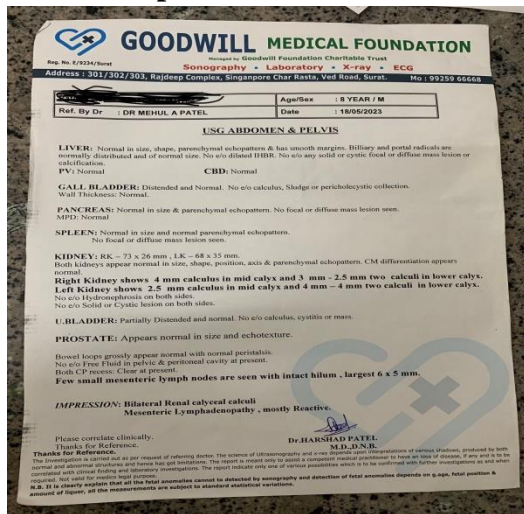
Divya Ashmarihar Kwath:- It is an polyherbal Ayurvedic formulation. It contains six ingredients (Gokshura, Kultath, Varun, Punarnavamool, Pashanbheda & Methi) which has Katu, tikta and kashaya rasa, laghu, rukha guna, katu vipaka. Ashmarihar Kwath has vata-kapha shamaka, bhedi and anulomana properties. Hence this medicine shows an advantageous effect in urinary stones, gall-bladder stones, Urinary tract infections, burning sensation & painful urination¹¹.

Neeri Syrup:- Aimil Neeri Syrup is a poly-herbal Ayurvedic proprietary formulation to normalize the deviated functioning of kidneys either due to infection or burning sensation in urination. It regulates the crystalloid-colloid imbalance & acts as anti-spasmodic, anti-microbial, diuretic and anti-inflammatory. It reduces the pain associated with urinary disorders¹².

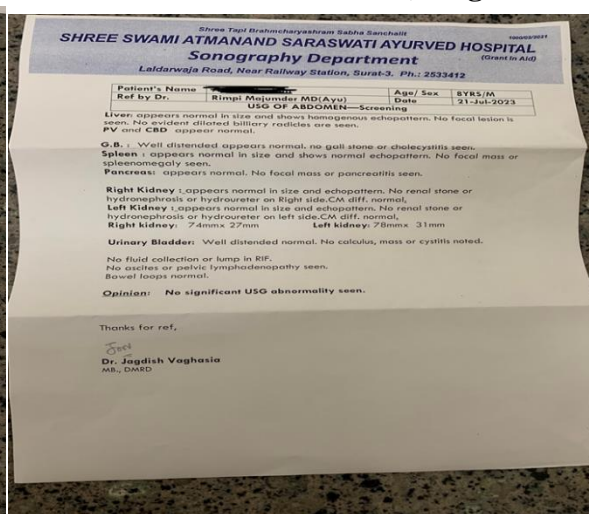
Conclusion:-

Chandraprabha Vati, Gokshuradi guggula, Ashmarihara kwath and Neeri Syrup are effectively disintegrated the pathogenesis of Ashmari, providing complete relief in abdominal pain, burning micturition, improved in appetite and also expulsion of Ashmari from the urinary tract in this case study. Pain management in case of child by noninvasive procedure is very significant. This case shows the effective conservative management of Mutrashmari with Ayurvedic formulations and helps to expell out calculi from both sides of the kidneys within the duration of 2 months without any lithotripsy.

USG Report shown before and after treatment (Images shown no 1 & 2)



(Image shown no-1 Before Treatment)



(Image shown no-2 After Treatment)

Conflict of Interest- Nothing to Disclose.**Acknowledgements:**

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