

**NON-INVASIVE MANAGEMENT OF RENAL STONES**

¹*Dr. Rajalekshmy P. R., ²Dr. Ramen Santra, ³Dr. Aparna Bagul and ⁴Dr. Sreekanth V. M.

¹Assistant Professor, Department of Swasthavritta, Parul Institute of Ayurveda, Parul University, Limda, Waghodia, Vadodara.

²Associate Professor, Department of Swasthavritta, Parul Institute of Ayurveda & Research, Parul University, Limda, Waghodia, Vadodara.

³Associate Professor, Department of Dravya Guna Vijnana, Parul Institute of Ayurveda & Research, Parul University, Limda, Waghodia, Vadodara.

⁴Assistant Professor, Department of Samhita & Sidhanta, Dhanwantari Ayurved College, Koidam.

Article Received on
29 March 2019,

Revised on 19 April 2019,
Accepted on 10 May 2019

DOI: 10.20959/wjpps20196-13781

Corresponding Author*Dr. Rajalekshmy P. R.**

Assistant Professor,
Department of
Swasthavritta, Parul
Institute of Ayurveda, Parul
University, Limda,
Waghodia, Vadodara.

ABSTRACT

The prevalence and incidence of renal stones is reported to be increasing across the world. Since long, so many newer invasive treatment methods were developed and the conservative treatments were very much neglected. But clinical experiences have proved that natural treatment modalities such as naturopathy and yoga can cure the renal stones. The self-healing mechanism of the nature is being utilized to treat the diseases and the patient and the disease is treated as a whole. The various elements of nature such as water, air, sunlight, mud etc. are used for treatment purpose. Naturopathy believes in theories of self-healing, toxemia and vital capacity. The nature's healing, curative and restorative potential are used in the treatment of various diseases. Naturopath uses fasting as an important method to eliminate

out the toxins from the body followed by soothing juice diet among which lemon juice, banana pith juice are the commonly used. The other treatments employed are alternate hip bath, kidney packs, compresses etc. The yogasanas that can be advised on daily basis are bhujangasana, ushtrasana, paschimottanasana etc.

KEYWORDS: Renal stones, Self-healing, Fasting, Toxaemia, Vitality.

INTRODUCTION

Renal stones/calculus/lithiasis is one of the most common diseases of urinary tract. Urinary calculus is a stone like body composed of urinary salts bound together by a colloid matrix of organic materials. It consist of a nucleus around which concentric layers of urinary salts are deposited.^[1] There are so many factors that contribute to the production of renal stones inside the body such as infections, metabolic causes etc. Dietary factors also play an important role in the pathogenesis as diet rich in red meat, fish, eggs can give rise to aciduria. Diet rich in calcium, tomatoes, milk, spinach, etc. produce calcium oxalate stones. Diet lacking in vitamin A causes desquamation of renal epithelium which precipitates calcium and stone formation occurs.^[2]

The common clinical features include

- 1) Quiscent calculus- a few stones, particularly phosphate stones may lie dormant for a long period. During this time, the stone gradually increases in size with destruction of renal parenchyma.
- 2) Pain- it is a leading symptom in renal calculus.
 - a) Fixed renal pain- if the stone is free and obstructs a calyx or uretro pelvic junction, there will be a dull flank pain due to capsular and parenchymal distension.
 - b) Ureteric colic- it occurs when the stone passes down the ureter or temporarily blocks the pelvi ureteric junction. It is an agonizing pain which originating at the loin, and radiates to the groin, testicle, vulva and medial side of thigh.
 - c) Referred pain - this is rare and referred to all over abdomen.
- 3) Hydronephrosis - patient complaints of lump in the loin and a dull ache due to hydronephrosis caused by renal stone.
- 4) Haematuria.^[3]

TREATMENT

- 1) Prophylactic management
- 2) Conservative measures- when the stone are sufficiently small, these can be naturally eliminated.
- 3) Extra corporeall shock wave lithotripsy
- 4) Surgical measures-
Endoscopic procedures- percutaneous nephrolithotomy

Open surgery- removal of stones is indicated when it cannot be naturally eliminated and may cause obstruction and progressive renal damage.^[4]

RECURRENCE

It can be divided into two varieties – false recurrence and true recurrence.

- a) False recurrence – which means a tiny stone was overlooked at the time of operation.
- b) True recurrence –a patient with renal stone is liable to produce further stone subsequently. So attempt should always be made to prevent the recurrence.^[5]

In most of the cases, patients cannot be managed on prophylactic measures but the doctors have to rely on surgical measures. Invasive treatments for renal stones are expensive and there is no assurance on the non-recurrence rates. Though clinical trials have not been successfully conducted, but as per clinical experiences, naturopathic treatment modalities can work a lot in dissolving the renal stones. The preventive effect of naturopathy and yogic asanas in the cure of renal stones is well accepted too.

NATURE CARE

Life is the manifestation of a judicious interaction between man and nature. It is only when he becomes indifferent to nature that he gets ill. Living as close to nature as possible has been an accepted way of keeping one fit. Naturopathy is defined as a drugless, non-invasive and rational and evidence based system of medicine imparting treatments with natural elements based on the theory of vitality, theory of toxæmia, theory of self-healing capacity of the body and the principles of healthy living.^[6] Naturopathy is a system of man building harmonic with the constructive principles of nature on the physical, mental, ethical and religious planes of living. It has nice health encouraging, disease preventive and curative as well as restorative potential. Naturopathic medicine is a unique system of primary health care in that it is not limited to a single modality of healing and cannot be identified with any one therapeutic approach. Naturopathic medicine incorporates many complementary medical approaches to treatment. Practitioners combine the art and science of medicine, using traditional forms of healing and modern scientific knowledge to treat and prevent illness.^[7] The modern medical system treats the symptoms and suppresses the diseases but does little to ascertain the real cause. Toxic drugs which may suppress or relieve some ailments usually have harmful side effects. Drugs usually hinder the self-healing efforts of the body and make recovery more difficult. Drugs cannot cure disease, but only the pattern of the disease is changed. The

toxicity they produce occurs at a time when the body is least capable of coping with it. The power to restore lies not in drugs but in nature.^[8]

Theories of Naturopathy

- 1) Theory of vitality- vitality is the inherent power in any individual that preserves and promotes health, prevents and cures disease.
- 2) Theory of toxemia- diseases are produced due to the accumulation of toxins, metabolic waste products, free radicals, foreign bodies etc.
- 3) Theory of self-healing- healing is an event of recapitalization of lost or misplaced normalcy. Wound healing, union of fractures, bleeding and coagulation are examples of self-healing capacity of the body.^[9]

Naturopathic Management of Renal Stones

Naturopathic management of renal stones can be broadly classified into two protocols.

Curative aspects

In the curative management, the person can be maintained in proper naturopathic diet, hydrotherapy, mud therapy etc.

Preventive aspects

As a prevention, to avoid the recurrence, the patient can be advised to practice wholesome diet and principles of healthy living.

Naturopathic Diet

The basic concept of diet prescription goes along with the basic principles of naturopathy. Naturopathic diet plan in renal stones include 3 stages-

1) Eliminative diet -Toxins accumulated inside the body are to be eliminated by fasting for 14 days. Fasting is the total rest (physical, physiological, sensory and mental rest) includes voluntary total abstinence from intake of food(solid or liquid) that demands digestion except water. Fasting provides rest and relaxation to the whole body. While fasting, the body requires only a minimum vital force to carry out its normal functions and a huge lot of its vitality is preserved.

a) Eliminative phase- accumulated toxins are eliminated out of the body through urine, sweat etc. our innate healing power will get activated and the body starts the healing process. Body

will feed upon the dead tissues, tumours and fibroids. The stage of elimination ranges from 3-7 days. The hunger which a person feels during the first 2 or 3 days after the commencement of his fasting is habitual. It is not a real hunger. It vanishes after 2 or 3 days. A real hunger gets revived after the internal cleansing process of the body is completed. Elimination manifest as headache, yellowish bad breath etc.

The following ailments occur during period of fasting-

- The sense of taste deteriorates.
- The tongue becomes filthy.
- Colour of urine becomes deep.
- Nausea and vomiting occurs.
- Insomnia

b) Phase of repair- main source of energy during this phase is the fat tissue. Body repairs damaged cells, tissues and organs using the preserved vitality. It ranges from 7-14 days.

b) Constructive phase- regeneration of new cells and tissues occur during this phase. During this time, patient feels hunger, can break the fast and start the soothing diet. Discomforts during fasting are good signs. They show that the vitality of the body has increased and the body is being cleansed.

Diarrhoea, rapid beating of heart etc occur. The disappearance of ailments signifies that the process of detoxification and cleansing of the body have been completed.

c) Soothing phase- Soothing diet can be given after the period of fasting. Juice therapy can be applied in renal stones. Juices increases the efficiency of the body to eliminate the toxins. It prevents the acid formation in the digestive system and eliminates the already formed excess acids. Juices accelerate the elimination of uric acid and other organic acids, the alkaline minerals present in the juices loosens the acid poisons in the body, dumping them into the blood stream, which are further eliminated by various organs of elimination.^[10]

- Banana pith juice-banana stem is rich in fibre and diuretic. It helps in maintaining the fluid balance and aids in detoxification of the body. It provides laxative and cooling effect inside the body.

Sweet and salt juices are prepared out of it.

Sweet juice-plantain stem/vazhathandu- 1 or 2 in no:

Boiled milk- half cup

Sugar- 2 tbsp.

Water- if necessary

Remove the outer layer of vazhathundu till core. Chop into small pieces. Grind with sugar and milk. Add more sugar and milk if necessary. Strain in a double cloth filter. Pour in a serving glass. Serve it chilled or at room temperature.

Salt juice- plantain stem / vazhathundu- 1 or 2 in no:

Sour curd- 2 tbsp

Salt and water- as needed

Pepper powder- 2 pinches

Remove the outer layer and chop into small pieces and immerse in butter milk to avoid colour change. Grind the pieces along with curd and salt. Add more water, whisk and strain in double cloth filter. Pour in a serving glass and garnish with coriander leaves. Serve chill.^[11]

- Cucumber juice- drinking cucumber juice alone or added to other vegetable juices is an excellent way to treat and correct kidney problems. It prevents excess retention of uric acid in system. Carrot and cucumber are a super powered up duo. Combined, they support kidneys in flushing out excess uric acids.
- Radish juice- radishes are detoxifiers and helps the body to flush out the excess toxins. The radish juices help to dissolve the stones so you can pass them more quickly.
- Water melon juice- watermelon is 92% water by weight, which means it will help your body to flush out very small stones also.^[12]
- Lemon juice- lemon contains citric acid which in turn acts as inhibitor of calcium stones formation and breaks up small stones. It makes the urine less acidic but inhibits the development of both calcium oxalate and uric acid stones.^[13]

2) Constructive diet- after the juice therapy, the digestive system gets activated. A diet consisting of rice, barley, kidney beans, banana stem, leafy vegetables etc is given.

Alternative Hip Bath

This is also known as revulsive hipbath. The temperature in the hot tub should be 40-45 degree Celsius and in the cold tub should be 10 -18 degree Celsius. The patient should sit alternatively in the hot tub for five minutes and then in the cold tub for three minutes. The duration of the bath is generally 10 to 20minutes. The head and neck should be kept cold with a cold compress. The treatment should end with a dash of cold water to the hips. It relieves the various neuralgia conditions of the genito-urinary system.^[14]

Hot and Cold Kidney Compress

Essentials: Hot water bag, ice bag, and material for abdomen pack.

Water temperature: Hot water 42-45 deg. C, Ice-cold water.

Duration: 45 minutes.

Procedure: The flannel and dry cloth of the abdomen pack are spread out on the table or bed. The hot water bag is placed on this and the patient is made to lie down in such a way that the hot water bag extends from the mid spine to the lower spine. The ice bag is placed on the abdomen, extending up to the lower portion of the chest bone (sternum). The abdomen pack is wrapped over this.

Uses: Fomentation diverts the blood from the branches of the renal artery, which is connected to the kidney, and leads off a portion of it from the renal vein into the muscular branches. The cold application causes contraction of the blood vessels of the kidney and thereby increases its activity. This pack is useful in cases of acute congestion of the kidney and inflammation of the urinary tract. It strengthens the kidney and hence, useful in Albuminuria (albumin outflow with urine), burning urination and stones in the kidney. This pack increases the output of urine.^[15]

Yogic Perspective

Yoga is the applied aspect of Indian philosophy. It is the art and science of self-realization and it deals with the factor of consciousness. Yoga aims to improve not only the health and its maintenance but daily practice helps in cure and prevention of diseases.^[16]

While considering the list of asanas, there are so many asanas which are particularly beneficial for the kidneys such as bhujangasana^[17], matsyendrasana^[18], paschimottanasana^[19], ushtrasana^[20] etc. All these asanas help in improving the blood supply to the renal organs and help in easy functioning of the organs.

Prevention

- Drink at least 3 litres of filtered water every day.
- Limit intake of caffeinated beverages such as coffee.
- Avoid cola like beverages.
- Reduce intake of high oxalate containing foods such as black tea, cocoa, spinach, beet leaves, parsley, nuts etc.

- Limit dairy products especially milk fortified with vitamin D.
- Eat less meat and poultry.^[21]

CONCLUSION

‘Nature never did betray, the heart that loved her’-William Wordsworth quotes that human as a rational animal showed always an interaction between environments. Treatment and prevention of renal stones can be perfectly done through natural measures. Though every system of medicine aims at health, no one can escape from the side effects of the drugs. Naturopathic system considers food and fasting as the medicine which are harmless to the body. ‘Let food be thy medicine’.

REFERENCES

1. A concise textbook of surgery, S. Das, third edition, chapter 57, Kidney and Ureter, 1165.
2. K. Rajgopal Shenoy, Manipal manual of surgery, chapter 39, Kidney and Ureter, 616.
3. A concise textbook of surgery, S. Das, third edition, chapter 57, Kidney and Ureter, 1168-1169.
4. A concise textbook of surgery, S. Das, third edition, chapter 57, Kidney and Ureter, 1172–1175.
5. A concise textbook of surgery, S. Das, third edition, chapter 57, Kidney and Ureter, 1172.
6. Dr. Dhiren Gala, Efficacy of fasting, Navneet Publications Limited, Dhanlal Distributors, Mumbai.
7. Michael J. Smith, M R Pharm S, ND, and Alan C. Logan, BA, ND, NATUROPATHY, COMPLEMENTARY AND ALTERNATIVE MEDICINE, January 2002; 86: 1.
8. Dr. Bargale Sushant Sukumar, Dr. Shashirekha.H. K, textbook of swasthavritta, 374.
9. Dr. Dhiren Gala, Efficacy of fasting, Navneet Publications Limited, Dhanlal Distributors, Mumbai.
10. Dr. Dhiren Gala, Efficacy of fasting, Navneet Publications Limited, Dhanlal Distributors, Mumbai.
11. <https://www.stylecraze.com/articles/banana-stem-juice-for-kidney-stone-and-weight-loss/>
12. <http://www.youngandraw.com/ultimate-kidney-flush-juice-recipe/>
13. <https://www.globalhealingcenter.com/natural-health/does-lemon-juice-dissolve-kidney-stones/>
14. Dr. Bargale Sushant Sukumar, Dr. Shashirekha.H. K, textbook of swasthavritta, 381-382.

15. [https://www.4remedy.com/naturopathy_details.Benefits of COMPRESSES and FOMENTATION](https://www.4remedy.com/naturopathy_details.Benefits_of_COMPRESSES_and_FOMENTATION)
16. Prof. R. H. Singh, Integrative Medicine, Chaukambha Vidyabhavan, Varanasi, Yoga physiology, 190.
17. Asana Pranayama Mudra Bandha, Swami Satyananda Saraswati, Yoga Publication Trust, Munger, Bihar, India, 198.
18. Asana Pranayama Mudra Bandha, Swami Satyananda Saraswati, Yoga Publication Trust, Munger, Bihar, India, 185.
19. Asana Pranayama Mudra Bandha, Swami Satyananda Saraswati, Yoga Publication Trust, Munger, Bihar, India, 223.
20. Asana Pranayama Mudra Bandha, Swami Satyananda Saraswati, Yoga Publication Trust, Munger, Bihar, India, 133.
21. <https://www.health.harvard.edu/blog/5-steps-for-preventing-kidney-stones> 201310046721