

**A REVIEW OF OBSTRUCTIVE UROPATHY AND THEIR
MANAGEMENT IN AYURVEDA*****Dr. Kanchan Chowdhury**

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Accepted on 22 July 2014***Correspondence for****Author****Dr. Kanchan Chowdhury**S.S.R., Department of
Swasthavritta and Yoga,
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Kidney is the most vital excretory organ. The nephrons filter a large amount of blood and eventually form urine. But sometimes there may be abnormality in the whole process which can lead to various disorders. Ayurvedic system of medicine has elaborated whole diseases into two distinct pathology – Mutrakriccha and Mutraghata. They are again divided into various subtypes and accordingly medications are prescribed. Susruta and Charaka described different Mahakashayas which includes ten drugs in each groups to treat those diseases. Concept of diuretic is not new to Ayurveda. Modern medicine has classified kidney diseases according to the site and nature of the disease. Their classification is very distinct. Modern investigations

like USG, CT scan can spot the exact location of the disease very smoothly. Yet Ayurveda has a lot of role to play in kidney disorders of modern era.

KEY WORDS: Nephrons, Mutrakriccha, Mutraghata, Mahakashayas, USG, CT scan.**INTRODUCTION**

Kidney is the most vital organ which is related to excretion of all types of toxic substances from our body. So, if the kidney is troubled, the gross bodily functions also get disturbed. In modern medicine different types of kidney diseases are recognized depending upon the site, responsible factors, stage of the diseases etc. and different approaches towards treating them are also mentioned. It is not one large filter. Each kidney is made up of about a million filtering units called nephrons. Each nephron filters a small amount of blood. The nephron includes a filter, called the glomerulus, and a tubule. The nephrons work through a two-step process. The glomerulus lets fluid and waste products pass through it; however, it prevents blood cells and large molecules, mostly proteins, from passing. The filtered fluid then passes

through the tubule, which sends needed minerals back to the bloodstream and removes wastes. The final product becomes urine. But in Ayurveda separate chapters are there which describes different kinds of urinary tract disorder and their cause with pathophysiology. Their explanation is based on doshas. The concept of formation of urine is also quite different from modern concept. Ayurveda has explained how to choose different kinds of medicines in urinary tract disorders based upon manifestations, dosha involvement etc. Treatments are also very promising in related kidney problems.

Concept Of Kidney Disorders In Ayurveda

Ayurveda gives a holistic approach towards various kidney disorders. The combination of urological and nephrological problems is described in a manner so that all diseases can be meticulously analysed and treated on the basis of tridosha theories. All are based on clinical manifestations, so one disease is completely different from others. Ayurveda has described the functional anatomy of urogenital system in a very simpler manner. Grossly better known as mutravaha srotas ii. These channels are connected to the vasti where formed urine is stored. All channels make a large network and acts as a unit. It is responsible for the formation, circulation and excretory transport of biological fluids, nutrients, body wastes and also the formulations which are internally used. The concept of formation of urine in Ayurveda is unique and demand special attention to be understood. The formation of urine starts at the beginning of digestion and its absorption especially absorption of water (water is considered as precursor of urine) . The absorption of water mostly takes place in the pakwashayaiiii then it is taken to the vasti (urinary bladder). After that it descends down to the mutravaha dwe (ureters) and ejected to mutra praseka (urethra). Ayurvedic scholars has described different kidney disorders with a supreme degree of clinical acumen. Their approach to the urinary disorder are very scientific on the basis of clinical picture as well as management. The various urinary disorders are described below-

Mutrakricchayas (Dysurias)iv : 8 Types

1. Vatika: neurogenic / traumatic dysuria or acute sterile urinary colic.
2. Paittika: Acute urinary tract infection.
3. Kaphaja : Subacute urinary tract infection.
4. Sannipataja: Acute/ Chronic urinary tract infection.
5. Abhighaataja: Traumatic or surgical dysurias.
6. Shakritaja : Constipational dysuria.

7. Ashmarija: Calculous dysuria.
8. Sukraja: Dysuria due to seminal stagnation

Asmaris Or Urolithiasis

Asmari means urinary stones. According to the feature of the stone and the systemic symptoms of asmaris are of four kinds.

1. Vataja: Resembles Uric acid stone.
2. Pittaja: Resembles Calcium oxalate, uric acid and cystone stone.
3. Kaphaja: Resembles Calcium phosphate stone.
4. Shukraja: Resembles Obstructed seminal fluid / Semen can form the nucleus of the stone.

Mutraghata (Retention Or Suppression Of Urine)

1. Vatakundalika - Mechanical obstruction
2. Vatavasti – Similar to the mechanical obstruction.
3. Mutrotsanga – Stricture urethra.
4. Mutrajathara – Resembles Distended bladder.
5. Mutratita - Incontinence of urine.
6. Vastikundala – Atonic bladder.
7. Asthila – Enlarged prostate.
8. Mutragranthi – Internal urinary bladder neck obstruction.
9. Ushnavata – Pyogenic cysto urethritis.
10. Mutrasharkara – Seminal stagnation.
11. Vidvighata – Simulate severe constipation and rectovesicle fistula.
12. Mutrasaada – Oliguric renal failure.
13. Mutrakshaya – Anuric renal failure.

Madhava Nidana vi, vii has included 13 different types of urinary tract disorders especially the diseases due to obstruction. Susruta Samhita also mentions 11 disorders. Bhavaprakash, a text of 15th century, elaborates the kidney disorders in a very simple but descriptive way. Vaidya Vinodlal Sen of Bengal Parampara has given signs and symptoms of Renal disorders in his book 'Ayurveda Vigyan'. The symptomatology described therein are related to modern concepts of Nephritis, raised urea, creatinine, renal calculus, obstructive uropathy, chronic kidney disorder etc. That may be considered one of the key books of Urology and Nephrology of Ayurveda.

Treatment

Treatment of different urinary disorders are described in various samhitas. For examples, *Charaka* has elaborated those drugs in Mutravirechaniya and Mutravirajaniya kashay viii each contain 10 drugs. The Susruta has also mentioned different herbs to treat renal disorders and they are 1. Trinapanchamula – These are diuretic, haemostatic and useful in dysuria. 2. Viratarvaadi group and 3. Ushakaadi group, these drugs of above are useful in painful urinary conditions and renal stones. Another group is 4. Utpaaladi group - which are useful in burning urination, haemorrhage, thirst, vomiting, poisoning etc. 5. Mutradoshahara – These remove the impurities of urine. 6. Mutravivandhaghna – These remove the obstruction of urination eg. Gambhari. Ayurveda has given more stress on obstructive urinary disorders. Vrihatrayees gave innumerable stress to this. The concept of Modern medicine should be given proper importance to have a comparison to these disorders. As for example, Mutraghaata has a strong equality with Obstructive uropathy. It is a condition in which the flow of urine is blocked. Urine backs up and can cause injury to one or both kidneys. Obstructive uropathy occurs when urine cannot drain through a ureter. As we know ureter carries urine from the kidneys to the bladder. Urine backs up into the kidney and causes it to become swollen (also known as hydronephrosis). Obstructive uropathy can affect one or both kidneys. It can occur suddenly, or be a long-term problem.

Common Causes Of Obstructive Uropathy Include

1. Bladder stones
2. Kidney stones
3. Benign prostatic hyperplasia (B.P.H.)
4. Bladder or ureteral carcinoma
5. Colonic cancer
6. Cervical cancer
7. Uterine cancer
8. Any cancer that spreads
9. Scar tissue that occurs inside or outside of the ureters.
10. Problems with the nerves that supply the bladder

Rarely, the problem may occur during pregnancy. This is called idiopathic hydronephrosis of pregnancy. Symptoms : Symptoms depend on how quickly the problem starts and whether one or both kidneys are involved. Symptoms may include:

1. Mild to severe pain in the upper back (flank pain). Pain may be felt on one or both sides
2. Fever
3. Nausea or vomiting
4. Weight gain or swelling (edema).

Patient may also have difficulties passing urine, such as

1. Urge to urinate often or frequency of urination
2. Decrease in the energy of urine stream
3. Dribbling of urine
4. Not feeling as if the bladder is emptied
5. Nocturia (Need to urinate more often at night)

Decreased amount of urine

Haematuria (Blood in urine)

Investigations

Imaging studies are used to make the diagnosis. These commonly include: □ Ultrasound of the kidney: A kidney ultrasound may be used to assess the size, location, and shape of the kidneys and related structures, such as the ureters and bladder. Ultrasound can detect cysts, tumors, abscesses, obstructions, fluid collection, and infection within or around the kidneys. Calculi (stones) of the kidneys and ureters may be detected by ultrasound. It may be performed to assist in placement of needles used to biopsy (obtain a tissue sample) the kidneys, to drain fluid from a cyst or abscess, or to place a drainage tube. This procedure may also be used to determine blood flow to the kidneys through the renal arteries and veins. It may also be used after a kidney transplant to evaluate the transplanted kidney. There may be other reasons that a physician to recommend a kidney ultrasound

CT scan of kidneys : A CT scan of the kidney may be performed to assess the kidneys for tumors and other lesions, obstructions such as kidney stones, abscesses, polycystic kidney disease, and congenital anomalies, particularly when another type of examination, such as Xrays or physical examination, is not conclusive. CT scans of the kidney may be used to evaluate the retroperitoneum (the back portion of the abdomen behind the peritoneal membrane). CT scans of the kidney may be used to assist in needle placement in kidney biopsies. After the removal of a kidney, CT scans may be used to locate abnormal masses in the empty space where the kidney once was. CT scans of the kidneys may be performed after

kidney transplants to evaluate the size and location of the new kidney in relation to the bladder . Intravenous pyelogram (IVP)- An intravenous pyelogram (IVP) is an X-ray test that provides pictures of the kidneys, the bladder, the ureters, and the urethra . An IVP can show the size, shape, and position of the urinary tract, and it can evaluate the collecting system inside the kidneys. During IVP, a dye called contrast material is injected into a vein in your arm. A series of X-ray pictures is then taken at timed intervals. IVP is commonly done to identify diseases of the urinary tract, such as kidney stones tumors, or infection. It is also used to look for problems with the structure of the urinary tract that were present from birth (congenital).

Voiding cystourethrogram

Renal nuclear scan

MRI

Prognosis

The prognosis depends on the cause, site, duration, and degree of kidney damage and renal decompensation. In general, relief of obstruction leads to improvement in kidneys, especially those destroyed by inflammatory scarring.

CONCLUSION

In Ayurveda, various treatment modalities are often used for the treatment of urinary tract disorders. Various studies have also been done which are sufficient enough to prove that these drugs are capable enough to treat various urinary tract disorders. So it is recommended that Physicians should use these classical medicines judiciously for the best of the mankind.

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