Original Article: Evaluation of Office Stones in Kidney Patients and How to Form and Treat Them

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Citation A.M.M. Fard, M.M. Fard*, **Evaluation of Office Stones in Kidney Patients and How to Form and Treat Them.** *Eurasian J. Sci. Tech.*, **2021**, *1*(6), 384-398.

https://doi.org/10.22034/JSTR.2021.289470.1047

Article info:
Received: 12 April 2021
Accepted: 28 June 2021
Available Online: 29 June 2021
ID: JSTR-2106-1047
Checked for Plagiarism: Yes
Language Editor:
Dr. Behrouz Jamalvandi
Editor-in-Chef:
Professor Dr. Ali Nokhodchi

Keywords:
Office stones, Kidney, Calcium, Diet, Intestine.

ABSTRACT

This study investigated the effect of office stones in kidney patients and how they are formed and treated. The urinary tract includes the kidneys, ureters, bladder, and urethra. The kidneys are located outside the peritoneal cavity on either side of the spine from the twelfth thoracic vertebra to the third lumbar vertebra. Types of stones are divided into two categories of calcium and non-calcium stones. Calcium stones are more common in men, the main causes of which include hypercalciuria due to hereditary formation, hyperuricosuria due to diet, hyperparathyroidism due to neoplasia, intestinal hyperoxaluria due to intestinal surgery. In the hereditary type, due to heredity and hypocitration, it can be caused by diet or heredity. Struvite stones are caused by a urinary tract infection caused by mold bacteria (Proteus). These stones are more common in women. Patients are treated with thiazide diuretics. Absorption hypercalciuria nephrolithiasis is treated only by surgical removal of the invasive parathyroid adenoma. Renal hypercalciuria is effectively treated with hydrochlorothiazides. Hyperuricosuric calcium calcification is a treatment with a diet low in purine, allopurinol and potassium citrate, and treatment of hyperoxaluria calcium calcification is with calcitramine, and treatment of hypocitration with potassium salts, including potassium citrate, is successful.

Introduction

Urology is a science that deals with diseases and disorders of the male urinary tract and the female immune system. Adrenal gland diseases in the surgical field are also related to this field.

The urinary tract includes the kidneys, ureters, bladder, and urethra [1-3]. A thorough understanding of the physiology of the kidneys and urinary tract is essential for the evaluation, design, and proper implementation of nursing care in individuals with renal and urinary disorders. In the follow-up of each patient, the history is of the utmost importance, and this is especially true in urology.

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It is important not only to know if the disease is acute or presumed, but also to know if it is recurrent, because recurrent symptoms may indicate an acute exacerbation of a person's symptoms. Stones are formed in the urinary tract when urinary concentrations of substances such as calcium oxalate, calcium phosphate and uric acid increase [4]. Urinary stones are the third most common disease of the urinary tract and only urinary tract infections and prostate disorders are more common. Urinary stones are common in both animals and humans. Different naming systems for urinary stones come from different disciplines [5]. For example, struvate ions, which are composed of magnesium ammonium phosphate hexahydrate, remember nature. The Roman historian HC. Gvonstrure (1772-1857) is known by this name. Prior to these scientists, these rocks were called guanites. Because magnesium phosphate is abundant in bat secretions, rocks usually composed of calcium, anzalt, and hydrates are called Weddellite rocks, because this substance is found in samples. Soil collected from the Weddell Sea is abundant in Antarctica [6].

The history of naming urinary stones is as interesting as the history of intervention methods for treating them since the first writings on the civilization of urinary stones have plagued humans. The etiology of these stones has not yet been determined definitively, if the constituents of urine are similar in both kidneys and there is no evidence of obstruction, then why do most stones occur unilaterally?

Why do not small stones pass through the ureter without incident early in their development? Why do some people make only one large stone and many others make small stones? Recent preliminary evidence for the possible association of nanobacteria with stones urinary incontinence is based on advances in the treatment of urinary stone surgery, based on our knowledge of etiology of these rocks has surpassed [7].

A thorough metabolic examination for appropriate medical treatment and lifestyle changes to help reduce the recurrence of recurrent urinary stones can be noted. Without follow-up and medical intervention, the rate of stone rounds within five years may be as high as fifty percent. In the Western Hemisphere, the core of most kidney stones is calcium salts and hydrochloric acid, cystine struvite. Calcium ejaculation accounts for 75 to 85% of all stones [8].

Calcium phosphate in rocks is usually in the form of hydroxyapatite or less commonly in the form of bronchitis. In the United States, urinary stones are the cause of 328,000 hospitalizations. The most common age of onset is the third decade. It is up to the fifth life and men are more affected than women. The pain caused by kidney stones is the second pain after labor pain [9].

Stones fall into two categories of calcium stones:

1-Absorption hypercalciuria nephrolithiasis;

2-Absorption of nephro-lithiasis hypercalciocytic;

Calcium stones make up about 75-80% of all kidney stones. Non-calcium stones include the following:

1-Struvite stones (15% of all urinary stones) are made in ammonia-rich alkaline urine due to the presence of urea-degrading bacteria.

2-Adric acid stones (5-10%) of all stones) may be seen in patients with gout. Cystine stones (1-2% of all stones) are formed exclusively in patients with a rare inherited defect in the renal absorption of cysteine (an amino acid).

3-Xanthine stones are caused by congenital xanthine oxide deficiency.

4-Indiana stones are seen in 6% of Indiana consumers late in people living with AIDS 6: Rare rocks: silicate rocks and radiocentric rocks are metrionic [10-14].

Kidney stones in simple language

In fact, the deposition of substances excreted by the kidneys that give crystals. If some of these materials stick together and form a solid mass, kidney stones are formed. If they are smaller than one centimeter, kidney sand is deposited. Kidney sand is usually excreted.

When this pebble passes through the ureter and enters the bladder, it is called bladder stone. There is no definite scientific evidence for kidney stones, but metabolic, mineral, and physical disorders are important factors as well. As for inheritance and diet, Fiji people who eat tasteless and sugary foods are less likely to have kidney stones. But most Indians who usually eat spicy and processed foods have kidney stones. Kidneys suffer and weather conditions (hot and humid) are known to be effective [15-19].

Kidney stones are one of the most painful

Diseases and pain are compared with labor pains! Kidney stone specimens are found even in ancient Egyptian mummies. About 80% of kidney stones are excreted in the urine, except in cases where the stone is too large from surgery such as laser, and nephrolithotomy.

Non-surgical and non-incision instances include extracorporeal waves. According to the scientific research service Scanius, new research shows that to prevent the return of kidney stones, restrictions on the consumption of animal protein and salt in the diet is more effective than reducing calcium intake. In summer, there is a greater risk of kidney stones because there is heat and drinking less water and sweating [20-22].

To prevent this problem, it is enough to drink enough water before meals, try to drink plenty of water for half an hour and up to an hour later. Do not drink water with food. Gradually, your body will get used to this condition, and while your stomach is not upset, you can drink plenty of water and keep your kidneys safe [23-25].

When kidney function is normal, the volume of electrolytes excreted each day will be exactly equal to their consumption. For example, Americans' daily diets contain 6 to 8 grams of sodium chloride (salt) and potassium iodine chloride, almost all of which is excreted in the urine. As for sodium, more than 99% of the refined water and electrolytes in the throat are reabsorbed when urine is excreted from the body [26-28].

If the amount of aldosterone in the blood increases, less sodium will be excreted in the urine because aldosterone facilitates renal reabsorption of sodium. The release of aldosterone from the adrenal cortex is largely controlled by angiotensin. Angiotensin levels are in turn regulated by renin, an enzyme released by specialized renal cells.

Potassium is the most abundant intracellular ion, accounting for about 98% of the body's total potassium. To maintain potassium balance, the kidneys are responsible for excreting more than 90% of their total daily potassium intake. Various factors affect the excretion of potassium by the kidneys. Aldosterone causes potassium to be excreted by the kidneys, in contrast to the effect described above on sodium. Acid-base balance, daily potassium intake, and filter flow rate in the distal tubule also affect potassium excreted in the urine [29-31].

Potassium retention is the lowest risk of renal failure. Regarding the regulation of acid excretion, catabolism or breakdown of proteins leads to the production of acidic compounds, especially sulfuric acid. Also, a normal daily diet contains a certain number of acidic substances. Unlike carbon dioxide, phosphoric and sulfuric acids are volatile and cannot be excreted through the lungs. Since the accumulation of these acids in the blood lowers the pH, it increases the acidity of the blood and impairs cell function [32-35].

They should be excreted in the urine. Every person with normal kidney function excretes about 70 milliequivalents of acid daily. The kidneys are able to excrete some of this acid directly into the urine until the pH of the urine reaches 5.4, which is 1000 times more acidic than blood. However, usually more acid is needed to be eliminated by excretion. Acid-free alone is not possible. These excess acids can bind in the urine by binding to chemical buffers [36-39].

Two important chemical buffers are phosphate ions and ammonia. When ammonia is buffered with acid, it is converted to ammonium [40].

Adjusting water disposal

Adjusting the amount of water discharged is also an important general function. Consume large amounts of dilute urine with plenty of fluids or water. Conversely, by consuming a small amount of fluid, the excreted urine condenses. Osmolality is the degree of dilution or concentration of urine can be measured by osmolality, which is the number of particles dissolved per kilogram of urine naturally [41].

When the filter passes through the tubules and collecting ducts, the osmolality may vary from 50 to 1200 mmol per liter, indicating the maximum ability of the kidneys to dilute and concentrate. When a person suffers from dehydration or fluid retention, less water is excreted and there are more particles in the urine, which leads to thick urine and high salinity. If a large volume of water is excreted, the particles will be diluted, the urine will be diluted and the osmolality will be reduced.

Certain substances can change the volume of water excreted, which are called osmotic active substances. When these substances are refined, they absorb water in the throat and tubules and increase the volume of urine. Glucose and protein are two examples of osmotic active molecules. The normal osmolality of urine is between 300 and 100 milliosmoles per kilogram. Specific density of urine is another measure of the ability to concentrate urine. This quantity compares the weight of urine with the weight of distilled water, which has a specific density of 1 [42-45].

Measuring specific density

Specific density can be measured in several ways:

1- The most common method is to use a calibrated metal rod with a special reagent area for a specific density.

2- Urometer (the least accurate method) in which urine is poured into a small cylinder and the urometer floats in the urine; the specific density is called the crescent level of urine.

3- Reflectometer, a tool used in laboratory conditions that measures the difference in the speed of light passing through the air and urine sample, specific natural density (when the liquid consumption is normal is 1.010 to 1.025).

Anti-urinary hormone

The regulation of water excretion and concentration of urine in the tubule is done by changing the amount of reabsorbed water. The amount of reabsorbed water is controlled by ADH (vasopressin). ADH is a hormone secreted by the posterior part of the pituitary gland in response to changes in blood osmolality. As water consumption decreases, blood osmolality increases and ADH is released, then ADH increases water reabsorption by affecting the kidneys, so blood osmolality returns to normal. Excess water consumes the secretion of ADH by the pituitary gland, so less water is reabsorbed by the renal tubule. This new condition leads to an increase in the volume of urine (diuresis). A dilute urine with a constant specific density (about 1.010) and a constant osmolarity (about 300 mmol / l, indicating an inability to concentrate urine) and premature kidney disease is common [46-49].

Self-regulation of blood pressure

Regulation of blood pressure is also a function of the renal system. When blood pressure drops, a hormone called renin is secreted by cells next to the glomeruli that specialize in the afferent artery, distal tubule, and efferent artery. It is known to be the strongest vasoconstrictor. Vascular contraction increases blood pressure.

Aldosterone is secreted by the adrenal cortex in response to stimulation by the pituitary gland, which in turn reduces blood flow to the gland or increases serum osmolality. As a result, blood pressure rises [50-53].

Kidney Cleansing

Kidney clearance is the ability of the kidneys to clear dissolved plasma. A kidney clearance test is performed to evaluate the ability of this important renal excretory function. Cleaning depends on several factors including refinement rate of the substance from the

glomerulus [15], the amount of substance that is absorbed during the open tubule and the amount of substance that is secreted into the tubule. It is possible to measure renal clearance of any substance, but creatinine clearance is of particular importance. Creatinine is an endogenous skeletal muscle byproduct that is refined in the glomerulus, passes through the tubules with little change, and is excreted in the urine. Therefore, creatinine clearance is a good measure of glomerular clearance (GFR). To calculate creatinine clearance, a 24-hour urine sample is collected. In the middle of this time, serum creatinine levels are measured [54-57].

Other kidney functions

The kidneys are also responsible for several other regulatory functions. When the kidneys experience a decrease in oxygen pressure in the renal bloodstream, erythrocytes are released to increase the production of red blood cells by stimulating the bone marrow, thus increasing the amount of hemoglobin available to carry oxygen. The kidneys are also responsible for the final conversion of inactive vitamin D to its active form, 1) 25-dihydroxycholecalcisol. Vitamin D is essential for maintaining the body's natural calcium balance. In addition, the kidneys produce prostaglandins and prostacyclin, which have a vasodilating effect and are important in maintaining renal blood flow [58-61].

Table 1. Characteristics of urinary pain

probable cause	Signs and symptoms	Characteristic of pain	The place of pain	Type
Acute obstruction, kidney stones, blood clots, trauma, acute pyelonephritis	Nausea, vomiting, sweating, paleness, shock symptoms, urinary (often ") purulent, abdominal pain	Persistent vague pain will be severe and stabbing in the form of colic if the capsule is suddenly ingested.	Spinal-rib angle and may spread to the umbilicus.	**Kidney**
Bladder severely dilated, infection, tuberculosis, interstitial cystitis	Persistent, persistent pain that may be exacerbated by urination and exacerbate bladder fullness.	Severe pain, as well as a dagger with a colic nature, wavy pain	Upper pubic area	**Bladder**
Ureteral stones, swelling, stenosis, blood clots	**Nausea, vomiting, ileus, bloody urine, paralysis**	**Severe pain, as well as a dagger with a colic nature, wavy pai**	**Rib angle, vertebrae, flanks, lower abdomen, testes or vulva, thighs**	**Ural**

Changes in urination

Urination is naturally a painless function that occurs five times a day and sometimes once a night. The average daily urination is 1,200 to 1,500 ml, although it will vary depending on fluid intake, sweating, ambient temperature, vomiting or diarrhea. Common problems with urination include: recurrence, urgency, burning, delay, incontinence, enuresis, polyuria, oliguria, and urinary incontinence [62-65].

Gastrointestinal symptoms

Gastrointestinal symptoms may be associated with urological disorders caused by autonomic and joint sensory innervation and renal-intestinal reflexes. Anatomical connection of the right kidney with the colon, duodenum, pancreas, common bile duct, liver and gallbladder may cause gastrointestinal disorders. The most common symptoms are nausea, vomiting, diarrhea, discomfort and abdominal distention. Urological symptoms can reduce disorders such as appendicitis, peptic

ulcer disease or cholecystitis, making them difficult to diagnose.

Physical examination

Head-to-toe assessment is necessary because renal failure affects all organs of the body. Direct touch may help determine the size and motility of the kidneys.

The method of touching the right kidney

One hand is placed under the patient's back by placing the fingers under the lower rib. This hand presses forward with the patient's deep tail. Left kidney is similarly touched in which the nurse places her right hand under the patient's lower left rib and her left hand on her abdomen. The causes of hypercalcemia and hypercalciuria are:

1- Hyperparathyroidism;
2- renal acidosis;
3- cancers: Granulomatous disease (sarcoidosis, tuberculosis) that causes an increase in vitamin d by granuloma tissue;
4- excessive consumption of vitamin d.;
5- excessive consumption of milk and alkali; and,
6- myeloproliferative diseases, like leukemia, true polycythemia, multiple myeloma, that cause abnormal production of blood cells from the bone marrow. These factors increase the concentration of calcium in the blood and urine and cause calcium deposition and stone formation.

Clinical manifestations

The clinical manifestations of urinary tract stones depend on the presence of obstruction, infection, and edema. When the stone stops the flow of urine and causes blockage, the hydrostatic pressure increases and the renal pelvis and the proximal part of the ureter dilate. Infection can occur due to stimulation of the stone. Some stones are asymptomatic or with few symptoms and cause gradual destruction of the infection. The rest of the kidneys cause severe dagger pain. The patient removes or crushes stones more than one centimeter in diameter so that they can be removed [17]. Bladder stones usually cause signs of irritation and may be associated with UTIs and urinary blood.

Evaluation of diagnostic findings

Confirmation of diagnosis by renal, ureter and bladder radiography (KUB), ultrasound, intravenous urography and posterior pyelography are done. Medication use, diet, and previous history of kidney stones in family members are identified to identify the causes of stones. By removing the stones, spontaneously or surgically, chemical analysis is performed on them and their composition is determined. The analysis of the stones can be an indicator for the underlying disorder. In addition to citrate, magnesium and sulfate, urinary stone inhibitors include: Urinary proteins and macromolecules such as glucose aminoglycans, pyrophosphates and urodiontin and fluoride. Citrate is apparently the most active inhibitor in urine.

Radiological examination

Intravenous pyelography (IVP)

This is the gold standard method in recognizing nephrolithiasis and anatomy of the upper extremities. Extraosseous calcifications on radiography may be mistaken for urinary stones. Easy-to-view views easily differentiate gallstones from right kidney stones [66-69].

Tomography

Kidney tomography is useful when oblique views are not able to recognize kidney stones. They are helpful in identifying stones with low apostasy, especially in the presence of flatulence or severe obesity.

KUB film and ultrasound

KUB film and kidney ultrasound together are as effective in diagnosing stones as IVP. The distal ureter is easily seen through a fluid-filled bladder with ultrasound. Edema and small stones not seen in IVP. They are easily accessible this way. Ultrasound is a non-invasive method in which sound waves pass through a body through a transmitter and

tissue abnormalities of internal organs are identified.

Abnormalities include fluid accumulation, lumps, congenital anomalies, changes in limb size or obstructions. Examination of the abdomen or kidneys, ureters, and bladder using X-rays (KUB) can determine the size, image, and position of the kidneys, and abnormalities such as kidney or urinary stones, hydronephrosis, and cysts. Tumors or kidney displacement are characterized by abnormalities of the surrounding tissues. So (KUB) or a simple photo of the abdomen, which is the first and simplest radiological examination of urine and is taken lying on its back (Supine). Also, in this photo can be seen bone disorders and calcification, and large masses of soft tissue. Long kidney diameter is the most appropriate measurement in radiology [18].

The average kidney length of an adult is about 12-14 cm. The left kidney is higher than the right kidney. In children over 2 years of age, the length of a normal kidney is approximately equal to the distance between the apex of the first lumbar vertebra and below the fourth lumbar vertebra.

Retrograde pyelography

Often the anatomy of the upper system and the location of small or transparent stones (radiolucent) is used.

Computed tomography (CT)

All urinary stones are visible if they are in the CT section. Small ureteral stones are not easily seen between CT sections, so CT is rarely used to examine small ureteral stones. This method is faster and less expensive today than (IVP). With this method, other peritoneal and posterior peritoneal structures are also imaged. In this method, the anatomical details of IVP are not seen well.

MRI (magnetic resonance imaging)

It is a very weak method in examining urinary stones.

Nuclear scintigraphy

Recently, this method has been considered. Markers or diphosphonate markers can show even tiny stones not seen in KUB, but the duct anatomy is not well revealed.

Conservative monitoring

Most ureteral stones pass spontaneously and do not require medical intervention. Spontaneous excretion depends on the size, shape, location, and edema of the ureter. Ureteral stones with a size of 4-5 mm have a 40-50% chance of spontaneous rejection and in sizes higher than 6 mm about 5%. Most stones are excreted within 6 weeks of the onset of symptoms. Ureteral stones have a 50% chance of spontaneous passage in the distal part, 25% in the middle part and 10% in the proximal part.

Solvents

The effect of solvents depends on the surface of the stone, its type and the volume of the solution and its method of consumption. Oral alkalizers include sodium and potassium bicarbonate and potassium citrate. More careful care should be taken in patients who are prone to congestive heart failure or kidney failure. Food has no effect on these substances. Only orange juice makes urine alkaline. Alkaline dying through intravenous with moles of sodium lactate is effective. Intrarenal alkalinization is performed by percutaneous nephrostomy. Acidification of struvite rocks requires acidification. Uric acid stones can be dissolved by alkalizing. Cystine stones can be dissolved in a solution of penicillamine, thiola or N-acetylcysteine. Due to the increase in complications and mortality in infection and obstruction caused by stones in patients with obstructive stones with fever and urinary tract infection should be done in the emergency room. After that, which is performed to determine the anatomy of the upper organ, a ureteral stent with two J-shaped heads should be used legally [19].

ESWL Impulse Stroke

Proximal ureteral stones and distal stones in postmenopausal women can be treated with ESWL. Rocks that are located on the sacroiliac joint and are not clearly visible may not be part of the ESWL function. Kidney stones that are less than 2-3.5 cm long are best treated with ESWL. Most pieces of rock are disposed of within 2 weeks. A 3-month follow-up with KUB film is a good guide for the need for additional treatment. A non-invasive method used to crush stones in kidney calyces in ESWL is a pressure or shock wave created by the sudden release of energy. It is transmitted through water and soft tissues. The treatment is usually performed with an average of 3000-1000 strokes. This method is expensive but reduces the length of hospital stay and the cost of treatment and does not require surgery to remove the stone.

Percutaneous nephrolithotomy

This method is the method of choice for the treatment of large (> 3.5 cm) renal and proximal ureteral stones that are resistant to ESWL and there is evidence of obstruction. Residual stones can be removed with flexible endoscopy, ESWL, by performing the above procedure again. The average blood loss during this operation is 2.8 grams per deciliter of hemoglobin.

Open stone surgery

The classic method is to remove the stone. Before giving the surgical incision, a radiograph should be taken because the stones often move. Cutting morbidity, the possibility of easily retaining rock fragments, and the success of less aggressive methods have made these practices less common.

Other Methods

Pilulototomy

This method is effective if the pelvis is extra renal. Numerous small pelvic kidney stones and calluses that are difficult to access can be removed with the help of coagulum. The coagulum was originally made from stored human fibrinogen. The risk of hepatitis and viral infections makes this method unacceptable. Injection of endogenous coagulation agents into the renal pelvis causes a jelly-shaped clot to form in the collecting system. Small rocks are trapped with coagulum and removed.

Anatronic nephrolithotomy

It is used for deer antler stones. A complete deer antler is a form of the pelvis and kidneys. Incomplete deer antler makes the pelvis of the kidney more functional. It spreads to at least two endoblasts. Blocking the renal artery and then cooling with loose ice keeps the surgical site relatively bloodless. The nerve hook is useful for extracting stones. Careful observation of the entire collecting system helps to remove all stones.

Radial nephrotomy

With this method, several calluses of the collecting system can be achieved. This is a good method for localized stones. It is usually used in destroyed calyxes that have a thin parenchyma on them. The use of ultrasound during surgery helps to determine the location of calyxes and stones by cutting with large mayo scissors and remove the remaining pieces. Radiography during the operation helps to prove that the stone came out.

Incomplete nephrectomy

It is for large stones buried in one pole of the kidney and severe thinning of the parenchyma.

Removal of stones by endoscopy

It is through the ureter, which is very effective for lower ureteral stones.

Urethra lithotomy

It is for long-term ureteral stones that are resistant to ESWL. Preoperative radiography is needed to determine the location of the stone

and to determine the appropriate incision. As soon as the ureter is identified, a vascular arch or clamp should be placed in the proximal part of the stone to prevent stone migration. The stone is exposed by making a longitudinal cut on the stone with a hook blade, and the nerve hook is a great tool for removing stones.

The main goals of treatment are removing the stone, determining the type of stone, preventing the destruction of nephrons, controlling infection and removing any possible obstruction. Examination of adults with recurrent kidney stones and children, even with one kidney stone, is required. A practical outpatient evaluation involves collecting two or three 24-hour urine samples, which are taken with each blood sample [20].

At least one urine sample should be taken. On weekends at home and sampling should be prepared on a working day. Treatment is long-term and therefore the drug should be taken based on the activity and severity of kidney stone disease and the importance of protection against the formation of new stones. Kidney stones should be identified, as treatment will depend on the type of stone. Opioid analgesics are prescribed to prevent shock and pain. NSAIDs may be just as effective as other painkillers in treating kidney stone pain. Or, hot steam to the side area can be helpful. Consumption of fluids is encouraged in cases such as vomiting or congestive heart failure and other restrictive disorders.

This increases the hydrostatic pressure behind the rock and helps to lower it. Fluid reduces the concentration of urinary crystals, dilutes urine and increases urinary output. Nutritional therapy plays an important role in the prevention of kidney stones. Every patient with kidney stones should consume at least 8 glasses of eight ounces of water a day to keep the urine dilute. Urine output should be more than two liters per day.

Treatment of kidney stones Calcium stones

Hydrochlorothiazide is the treatment of choice for type 2. Initially, there is a decrease in renal excretion of calcium, increased calcium and deposition in the bone, and finally the capacity of the bone reservoir is completed and the drug becomes ineffective. Hydro-chloro-niazides have a long-term effect. These drugs have no effect on the intestinal tract. Cellulose phosphate as an effective drug regimen may replace hydrochlorothiazide's and vice versa.

Absorbent hypercalciuria type P treatment

There is no specific medical treatment. Calcium excretion returns to normal levels with a limited diet. Patients should increase their daily calcium intake to 600-400 mg.

Treatment of idiopathic hypercalciuria (Type of hypercalciuria nephrolithiasis)

Thiazide diuretics reduce urinary calcium in idiopathic hypercalciuria and are effective in preventing stone formation. The results of two three-year tests showed that in the group treated with thiazide Rock formation is reduced by 50%. Successful treatment is replaced by phosphate. Neutraphos orthophosphate inhibits synthesized vitamin O and is given 13-24 times a day at a rate of 250-2000 mg. It is recommended to take the drug before bed and after meals. Orthophosphate does not alter intestinal absorption of calcium [21].

Treatment of hyperuricosuric calcium stones

Patients who consume too much purine are treated by switching to a low-purine diet, and patients who produce too much adric androgen are successfully treated with allopurinol. Aloprovinol is an inhibitor of xanthine oxidase and inhibits the production of hydrochloric acid without interfering with purine anabrasium. This drug should be prescribed with strict control. Treatment is started with 100 mg per day and can be increased to 300 mg daily. Potassium citrate is an alternative treatment, especially in those with hypothyroidism.

Reabsorption hypercalciuria treatment (primary hyperparadism)

Surgery to remove an invasive parathyroid adenoma is the only effective way to treat the disease, and medical efforts are futile. In

treatment of renal hypercalciuria, it is effectively treated with hydrochloric acid and thiazides. Despite the role of this drug in type absorption hyperchlorite, in this group, hydrochlorothiazide's have a long-lasting effect. These drugs have both bertobulproximal and distal effects. As a diuretic, they reduce circulating blood volume and thus stimulate the absorption of calcium and other components from the proximal tubule. They also increase reabsorption in the distal tubule. They correct secondary hyperparathyroidism.

Treatment of hyperoxaluria

In effective treatments for secondary oxaluria to intestinal absorption, administration of amine cholesterol, resin bound to oxalate oxide 8 to 14 g, correction of fat malabsorption and low-fat diet, calcium lactate 8 to 14 g daily is a method that oxalate. They deposit in the intestinal tract. Treatment for hereditary hyperoxaluria includes high fluid intake, neutral phosphate, and pyridoxine (25 to 100 mg daily). Citrate prescribing may also have benefits. Despite extensive treatment, reversible renal failure secondary to stone formation occurs. The liver has successfully corrected enzymatic defects by kidney transplantation in patients with inherited hyperoxaluria.

Treatment of hypofiltration

Treatment with alkalis increase citrate excretion; bicarbonate or citrate salts are commonly used. Potassium salts are preferred because sodium increases calcium excretion and thus reduces the effectiveness of treatment, so potassium citrate treatment is successful.

Treatment of idiopathic calcium calcification

Some patients have no metabolic cause for calcification despite complete metabolic studies. The best treatment for these people seems to be high fluid intake to maintain a specific urine weight of 1.500 or less during the day. Oral phosphate in a daily dose of 2 g may reduce urinary calcium, and Pyrophosphate increases and thus reduces its recurrence rate. Orthophosphate initially causes nausea, mild diarrhea, but with continued use may become resistant to these conditions [22].

Treatment of struvite stones

The treatment is to remove the stone. Complete removal of the stone and then sterilization of the urinary tract is the treatment of choice. Open surgery in case of obstruction is effective in reducing the volume of the stone and improving kidney function. However, in 25% of cases, the stone recurs. Washing the pelvis and calyces with hemic acid, which is a solution of struvite solvent, can reduce the recurrence rate. Newer procedures, such as lithotripsy and percutaneous nephrolithotomy, percutaneous nephrolithotomy, alone or in combination, have largely replaced open surgery, in 50-90% of patients without formation. Recurrence of the stone has been successful, and antimicrobial therapy has been used after surgery for acute infection and to keep the urine sterile, in the hope of minimizing stone growth. Culture of urine and culture of stone fragments with antibiotics of choice Methamphetamine Mandalate, which lowers urinary pH and releases formaldehyde, is used to temporarily inhibit infection in the presence of stones in the presence of acetaminophen, which is an inhibitor of urease. Non-surgical methods may be used. Side effects include headache, tremors, and thrombophlebitis that reduce its use. Lowering urinary pH and chronic administration of NH4cl may slow stone growth.

Treatment of uric acid stones

Two important therapeutic goals are: increasing urine pH (above 6) and keeping urine volume above 2 liters per day and reduce the excretion of uric acid in the urine, less than one gram per day, reduce diet Purine or purine prescription helps reduce uric acid excretion. Alkaline substances in the amount of 1 to 3 mmol per kilogram of body weight per day are administered in 3 or 4 divided doses at equal intervals so that one of the doses is consumed at bedtime. These alkalis dissolve rocks and depend on the surface area of the rock.

Approximately one centimeter of stone is dissolved each month by alkalization (seen in KUB). Potassium citrate may increase the urinary pH when urinary pH increases. The risk of crystallization of calcium salts decreases, while sodium citrate or sodium bicarbonate does. If the pH of the urine overnight is less than 5.5, the night dose of bicarbonate can be increased or 250 mg of acetazolamide cream added at bedtime in people who develop uric acid stones and also have hyperuricosuria. Patients who continue to make uric acid stones despite treatment with fluids, alkalis, and a low-purine diet should also use plurinol plums, as alkaline consumption alone can lead to the formation of alkaline purines. The stone becomes calcium phosphate. Treatment of cystine stones includes the consumption of fluoride fluids (more than 3 liters per day) and alkalinization of urine (keeping the pH high and nitrazine control paper controlled) and low-sodium diet (reducing the number) and penicillamine.

A low-salt diet (100 mmol per day) reduces cysteine excretion by about 40%. Penicillamine reduces urinary cystine levels by combining with amino acids to form a solution complex. Skin rash (occasionally itchy), nausea, vomiting, loss of taste and anorexia have been reported with this medication. Due to the possible inhibition of pyridoxine by penicillamine should be prescribed during. Captopril, which has a free sulfhydryl group for binding to cystine, is used in a limited number of patients and has been successful. Diets low in methionine are not clinically viable, but patients should not be greedy for protein foods.

Treatment of xanthine stones

The direction of treatment is determined based on the symptoms and evidence of urinary incontinence and the consumption of plenty of fluids and alkalinization of urine is done for prevention. In case of allopurinol stone number, a limited diet is suitable for purine [23].

Treatment of Indina Wear Stones

Discontinuation of the drug with intra-drained hydration usually causes the stone to pass. These stones disintegrate during the removal of the bubble. In treatment of silicate stones, surgical treatment of these stones is similar to surgical treatment of other stones.

Treatment of triamterene stones

To treat such stones, stopping the drug prevents the recurrence of stones. What follows are newly developed methods.

New methods

1-Breaking the stone through the outside of the body, which causes the stones to fragment in place by placing the kidney and pelvic stones and the beginning of the ureter in the presence of shock waves. In this method, the patient is immersed in a water tank or watery stomachs are placed between the patient and the waves. The kidney with the stone is in the center of the turn-reflecting reflections, then the shock waves are generated by high voltage electrical discharge. These waves are concentrated by the reflectors on the desired location, so that the stones break as they pass through the patient's body. After multiple evacuations, most of the stones fall into the bladder in the form of powder from the past.

2-Ultrasound lithotripsy through the skin, in which an inflexible device similar to a cystoscope is inserted through a small skin incision in the patient's flank and reaches the pelvis.

3-Breaking the stone with a ureteroscope is a laser that is used to remove ureteral stones. Different types of lithotripsies have largely replaced surgical removal of pelvic and pelvic stones by surgery.

The effect of honey on kidney diseases

Honey is a good disinfectant for the urinary tract and if it is consumed continuously as a solution in water, it will increase the urination

and crushing of urinary tract stones. Black juice with olive oil in the amount of 3 tablespoons per day is recommended [24].

Conclusion

Expressing a large number is available in terms of climatic conditions because it is alkaline in terms of Tps due to the mountainous nature of the area and the presence of drinking water used, which is chemically tested on it. Nitrite, nitrate and other chemical items are difficult. There is nothing special. According to the study, a small number of patients, i.e. 85 people who have been treated for 5 years, have been diagnosed with a radiograph, ultrasound of the abdomen, kidney, urinary tract and bladder, and the location of stones in the kidney or bladder, or in the ureter using X-rays and effective treatment.

For example, for patients with kidney stones, the ampoule of Yaxon and Heparin is used, and for patients with bladder stones, the ampoule of keflin and fbetayanin and radical prostatectomy are performed. It is a serum for patients with ureteral stones. Diagnosis of stones in terms of calcium or non-calcium and its types was not possible because there is no urology department and not having it should be considered as one of the important problems of this city. Because rapid diagnosis and timely treatment of urinary stones is essential to prevent further kidney damage. The results of the research performed by recording and recording the age and sex characteristics of patients are as follows:

1- 2002 Total number of clients: 14 (57% male - 43% female) and the prevalence of stones, respectively: 6 cases of kidney stones (4 females and 2 males), 6 cases of ureteral stones (2 females and 4 males) and 2 cases of bladder stones (2 males)).
2- 2003 Total number of clients: 21 (24% male - 76% female) and the prevalence of type of stone, respectively: 19 cases of kidney stones (15 females and 4 males), 1 case of ureteral stones (female) and 1 case of bladder stones (male) In 2004, the total number of clients: 26 (58% male - 42% female) and the prevalence of type of stone, 20 cases of kidney stones (10 females and 10 males), 6 cases of ureteral stones (1 female and 5 males) and bladder stones without cases. 2005 Total number of clients: 8 people (75% male - 25% female) and
3- The prevalence of type of stone, respectively: 2 cases of kidney stones (1 female and 1 male) 1 case of ureteral stones (female) 5 cases of bladder stones (5 males). Year 2006 Total number of clients: 16 people (62.5% male - 37.5% female) and the prevalence of type of stone, respectively: 6 cases of kidney stones (4 females and 2 males) 4 cases of ureteral stones (2 females and 2 males) 6 cases Bladder stones (6 men).
4- Evaluation of the highest percentage of urinary stone patients in terms of age: Kidney stones in women aged 40-50 years and in men aged 60-70 years. Ureteral stones in women aged 20-30 years and in men aged 40-50 years. Bladder stones in men aged 60-70 years and no cases of women with bladder stones have been seen for 5 years, and if they have, they have left the town.

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