

Important Answers

Regarding Kidney Stone Disease

Kidney stone disease, or "Nephrolithiasis," is a common disorder, with 2-3% lifetime incidence rate in the United States. A disease found most often in middle-aged men, there are five main stone types, including calcium stones (78%), infection related stones (15%), uric acid stones (5%), cystine stones (1%) such as xanthene.

Although some stones can be passed naturally, many may require surgery or can be broken down into smaller pieces using a stone-crushing method called lithotripsy. Your physician will help you determine what type of stone you may have, ways to keep existing stones from getting larger, how to treat your stones, and how to prevent future stones from forming.

For patients that have passed their first kidney stone, it is very difficult to predict the likelihood of recurrence. Seventy percent of patients who pass one stone will have another within 10 years. However, patients with severe disease may have multiple stones occurring monthly or more often. Many stones will recur within 5-7 years, with a larger number peaking at two years. As kidney stone patients age, their rate of new stone formation appears to decline, and remissions are common after the age of 50.

RESOURCE SUPPORT

For additional information about kidney stone disease, the following resources are available:

The National Kidney Foundation, Inc.

www.kidney.org
30 East 33rd Street
New York, NY 10016
1-800-622-9010

The National Kidney Foundation provides a nationwide telephone service and website for patients with kidney stone disease and their families and friends. Numerous state chapters also have web sites available to provide regional information and reference materials.

Associated Pathology Medical Group, Inc. (APMG)

www.apmglab.com

APMG is the longest standing independent pathology practice in Silicon Valley. Our group consists of eight pathologists at two practice sites: Los Gatos and Santa Cruz, serving physicians throughout California. Our pathologists are outpatient and inpatient specialists that produce accurate, diagnostic reports within 24 hours in most instances. Abnormal cases are routinely peer-reviewed.

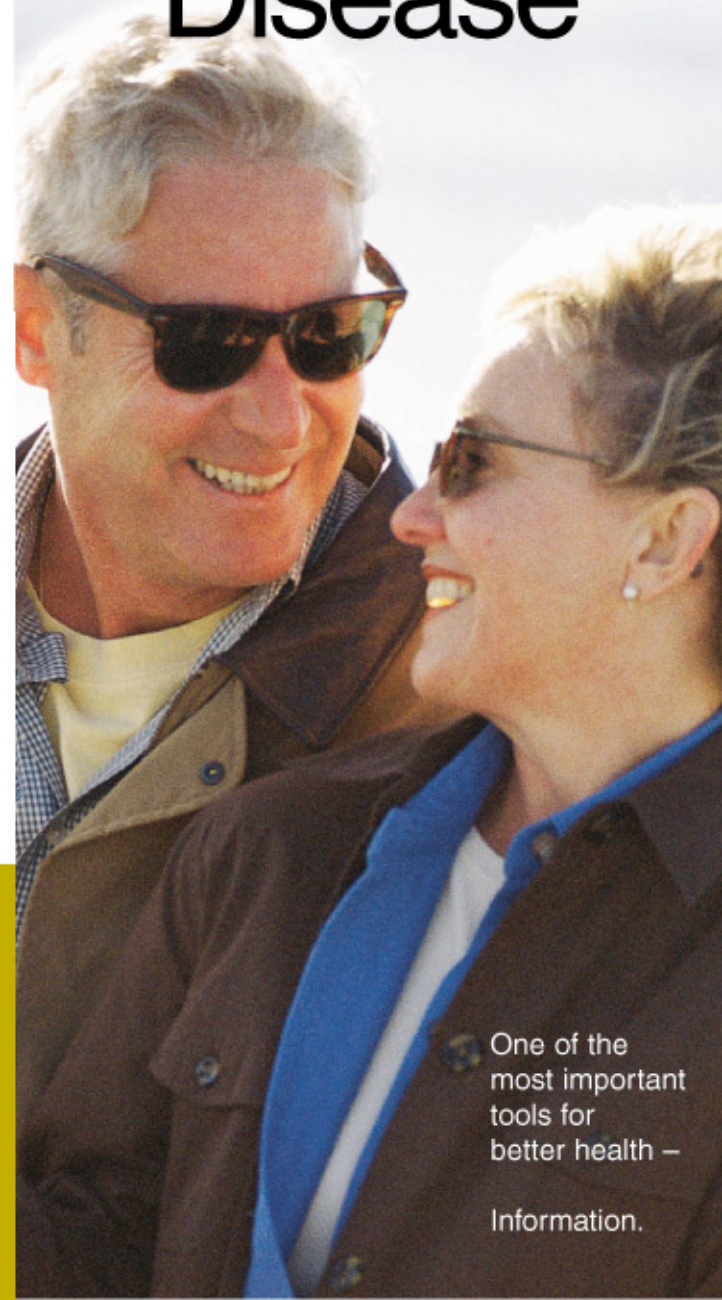


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Kidney Stone Disease



One of the most important tools for better health –

Information.

Knowledge is power.



Q: What is a kidney stone?

A: When certain chemicals in the urine form crystals that stick together, a hard mass called a “kidney stone” occurs. Most stones start forming in the kidney, and some may travel to other parts of the urinary tract, including the ureter or bladder. As stones are formed, they may vary in size, with the larger stones potentially blocking the flow of urine or irritating the lining of the urinary tract.

Q: Am I at risk?

A: The risk factors and common clinical presentations will vary, depending on the type of stone. There are, however, certain similar characteristics found for “stone formers” which include:

- Family history of stones
- Males between the ages of 30-50
- Diets high in calcium (dairy products) or oxalates (colas, chocolate)
- Reduced water consumption
- Living in a hot climate

Q: What are the symptoms?

A: Although kidney stones may cause different symptoms, depending on their location, size, and shape, the sudden severe pain associated with passing a stone is an event that most patients will not soon forget. Other symptoms include:

- Frequent or painful urination
- Infection
- Bloody urine
- Fever or nausea
- Flank (side) pain or tenderness

Q: How is a kidney stone detected?

A: Once you have identified the symptoms, your doctor will usually conduct a full medical evaluation to determine the cause of your symptoms. During your visit, your physician will request a number of diagnostic tests. Test results are used by your physician to determine the underlying cause of stone formation. Furthermore, your physician may request a stone analysis to determine the chemical makeup of your stone. This information will assist your doctor in discovering what type of stone you may potentially develop in the future. Ultimately, diagnostic test results will be used to help establish your individualized treatment program and prevention guidelines.

TREATMENT OPTIONS

Q: Do I have a choice of treatment?

A: Yes. Your physician will determine an appropriate treatment program, depending on the type of stone you have formed. Because the natural course of the disease is so variable, it is difficult to provide firm guidelines regarding stone treatments. Each patient should be treated on an individual basis, depending on the severity and course of disease. Patient cooperation is crucial, especially since the treatment can be prolonged, may have some side effects, and is oriented toward prevention. General recommendations may include a high fluid intake to decrease the urinary concentrations of stone-forming substances, reduction in

dietary sodium and protein intake to help reduce stone frequency, or a reduction of calcium and oxalate consumption. Depending on the type of stone you have, your diagnostic test results and your medical history, your physician may suggest lithotripsy, surgical intervention, prescription medication, or dietary changes to help you reduce your levels of stone-forming chemicals. As always, it is important for you to discuss thoroughly the various treatment options with your doctor

This information is not intended to provide specific medical or professional advice. Your physician should provide definitive medical advice, as well as answers to your medical-related questions.



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