KIDNEY STONES

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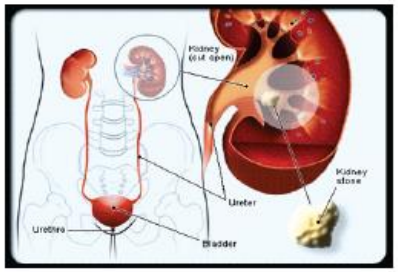
A kidney stone is a solid mass made up of crystals that is formed in the kidney or ureter (tube from the kidney to the bladder). Kidney stones are formed when certain chemicals in the body stick to each other. They may be tiny or very large.



Who is prone to developing kidney stones?

- Male Caucasians
- Obese people
- People who develop urinary tract infections
- People with a family history of stone formation
- People who do not drink enough liquids
- People who eat a diet rich in animal protein and in addition drink alcohol
- People with certain medical conditions and on certain medications

What are the symptoms of kidney stones?

Kidney stones usually cause symptoms when they start to move down the urinary tract.

Symptoms include:

- Excruciating pain in the back or side
- Vomiting
- Blood in the urine
- Fever and chills

What are the different kinds of stones?

CALCIUM OXALATE

URIC ACID

STRUVITE

CYSTINE

Calcium oxalate stones are the most common and are caused by different mechanisms such as abnormal kidney function, a genetic predisposition and high serum calcium levels.

Uric acid stones contain the breakdown product of animal protein and may be caused by eating too much animal protein, drinking alcohol which interferes with the excretion of uric acid, abnormal kidney function and a genetic predisposition.

Struvite stones are more common in females and generally the result of a urinary tract infection. They can be very large and damage the kidney.

Cystine stones are rare and are associated with an inherited kidney disease, cystinuria.

How are kidney stones diagnosed?

The typical symptoms are very suggestive of kidney stones. The diagnosis is confirmed with imaging studies such as a CT scan.

What is the treatment for kidney stones?

Most kidney stones will be passed within 48 hours with adequate fluid intake and pain relief. If the stone is too large to be passed, surgical interventions are required.

How can the repeat formation of kidney stones be prevented?

If a kidney stone has been passed it is useful to have it analysed by the laboratory to determine the type of stone. Specific prevention measures can then be considered.

It is especially helpful to increase fluid intake to ensure that the urine is dilute.

References:

http://www.kidney.org/atoz/content/kidneystones.cfm

http://www.medicinenet.com/kidney_stone/article.htm

http://www.medicinenet.com/kidney_stone_pictures_slideshow/article.htm