

KIDNEYMATTERS

Information from the National Kidney Federation - supporting kidney patients, their friends & family

PAIN IN KIDNEY OR URINE DISEASE



www.kidney.org.uk

HELPLINE 0800 169 09 36

nkf
KIDNEY PATIENTS UK

Pain in Kidney or Urine Diseases

Key points

- Pain can be an important sign of kidney disease
- Not all pains that seem to come from near the kidneys are caused by kidney disease
- Most painful kidney conditions can be treated effectively
- There are conditions where medical treatment cannot completely eliminate pain

Pain Guide - Important

Every person feels pain in different ways and in different places. Different people respond to pain in different ways. This information area is not designed to make a diagnosis in your case. A diagnosis must be reached on an individual basis with your own doctor. You are probably reading this because you think pain is coming from your kidneys or urine. This may not be the case - your pain could be due to something else entirely. Please use this section to understand some of the symptoms but seek medical advice from a doctor to check the symptoms come from the kidney. If a diagnosis is made by a doctor then the NKF may have further information about your diagnosis.

What can cause pain?

Pain is the main way that our body tells us something is wrong. Pain is one of the more common reasons for going to see a doctor for suspected problems with the kidneys or urine.

Unfortunately everything is not as simple as might be expected. First, most of the important causes of kidney failure do not cause any pain in the kidneys. Secondly, not all pains that come from the areas of the kidneys come from the kidneys. When assessing someone with pain, a doctor has to be careful and may need to perform a lot of tests which can take some time. Even after tests, a doctor may not be absolutely sure of the cause of pain. Of course this can be difficult for the person suffering from pain.

Types of pain

People use different words to describe pain, for example - aching, stabbing, excruciating, agonising. It is very helpful for doctors to know some of the following information to understand more about the pain : -

- where does the pain start?
- does the pain travel from a starting point to another place?
- is the pain constant or does it come and go?
- if pain comes and goes, does anything make it go away (such as passing water, or bending over, or lifting weights)?

Where is pain felt?

Pain can come from any part of the kidneys and urine drainage system. The next few paragraphs try to describe how pain occurs with various types of kidney problem. Please remember that everyone is different, so that people feel pain in different ways and in different places. Also, peoples' bodies and minds respond to pain in different ways.

Pain in the back

The kidneys are found in the upper back (the 'small of the back', it is often called). Kidney disease can cause pain in this part of the upper back. Although this is true, pain in this area often comes from the muscles of the back, or from the spine. Pain from the kidneys is often constant, or can be sharp, like being stabbed. Pain from the muscles or the spine comes on with bending over or with lifting, and may be felt in the middle of the back, or on either side of the back.

The commonest causes of kidney pain in the back are :

- Infection - an infection in a kidney is called acute pyelonephritis),
- Kidney stone - these can cause a very, very severe pain that comes on in spasms, and travels down to the groin, and is called renal colic by doctors.

Pain in the groin (or in the testicles)

The body feels pain in unusual ways, and sometimes pain from an internal organ is felt away from the site of the internal organ (the commonest example is pain from the gallbladder, in the tummy, which can be felt on the tip of the shoulder).

The kidneys can be a little like this, so that pain in the kidney can be felt all the way from the back down to the groin, or in the testicles in men.

The testicles can also feel painful due to infection (this can be called orchitis or epididymo-orchitis).

The testicles can also enlarge or become painful due to other important conditions. One of these is testicular cancer, and advice should be sought from a doctor if a testicle (or both) is permanently painful, or increases in size.

Pain that gets worse while passing water (or just before passing water)

A stinging pain in the tube (called the urethra) that carries urine out of your body (from the bladder) is a common symptom of urine problems. Infection is the commonest cause of pain that is present while urine is being passed, and might cause intermittent pain or itching in between passing urine.

If an infection is confined to the bladder there may also be urgency to pass urine frequently, and some pain in the front of the tummy, right down at the bottom. This type of infection, in the urine and bladder, is called cystitis. Bugs in the urine that cause infection can also make the urine foul smelling or cloudy.

What painkillers are safe to take?

Some painkillers purchased 'over the counter' at the chemists can be used for kidney pain.

Paracetamol is the safest painkiller if you have kidney pain. Do not take above the recommended dosage (one gram - 1g or 1000mg - of the active

ingredient, usually two tablets, four times a day).

If this is not effective, painkilling tablets containing codeine may be used.

If this is still not effective, talk to your doctor about painkillers. Unfortunately it is often difficult to get complete pain relief in people with severe kidney pain.

Some painkillers can be harmful in some people with kidney disease. Ibuprofen is not generally recommended if there is any degree of kidney failure. Ibuprofen is also sold under the trade names 'Nurofen' and 'Advil'. Only take ibuprofen for kidney pain if its use has been recommended by a doctor.

Tests that may be performed for pain

Doctors can investigate pain that seems to come from the kidneys with a number of tests. These are examples of the simple tests, but the needs of each person will be considered individually.

Some tests may also be performed to make sure the pain is not coming from the muscles or bones of the back, or from the bowel or gallbladder. It is not possible to list all these here.

a. Urine dipstick. This is when a small sample of urine is tested with some 'indicator paper' on the end of a small plastic stick. This test is performed in GP surgeries and in hospital. The dipstick tests for blood or protein in the urine. The commonest cause of blood and protein in the urine is infection. Other causes are given in the information leaflets on blood in the urine and protein in the urine. Urine sticks also sometimes test for nitrates, which may be positive in a fresh urine sample if there is infection.

b. Urine culture. Urine can be sent to the laboratory for tests to see if there are bugs in the urine. This culture test requires clean urine that has not contaminated by bugs from the skin. Therefore doctors ask for a 'mid stream urine'. This means the sample is collected half way through passing urine. Ask for detailed instructions if you are not familiar with collecting this type of sample.

- c. **Scan or X ray of the kidneys and bladder.** Scans can show the size and shape of the kidneys, and whether the bladder is emptying fully each time urine is passed. There are two common types of scan, an ultrasound (which uses a sound wave probe on the skin), and an IVU, or 'intravenous urogram', which uses X rays after an injection of an X ray dye into a vein in the arm. Check which type of X ray has been ordered, and read any instructions about going for the test (usually you are asked to drink plenty and then not to have a pee before the test starts). Another type of scan is called a CT KUB which does not usually need any injections and is a type of CT scan.
- d. **Blood tests** to measure whether the kidneys are removing waste from the body normally are usually performed.
- e. **Blood pressure** should be measured, as kidney disease can cause high blood pressure.
- f. **In some cases** where kidney pain is not caused by infection and there is a suspicion of glomerulonephritis, a kidney biopsy may be performed.

Specific conditions that can cause pain

Here is a brief summary of some of the causes of pain from the kidneys or bladder:-

- a. **Infection** is the commonest. A bacterium (bug) grows in the urine. It is diagnosed with a mid stream urine test (see above), and is treated by increasing fluid intake (to flush more urine through the system) and a course of antibiotics. A single infection may require no further tests, multiple infections may be investigated with scans of the kidneys (see above).
- b. **Kidney stones.** These are small lumps of, usually, chalky material in the kidney, which can cause pain in the kidney. They may cause pain in the side and groin as they pass down from the kidney, or as

they leave the bladder while someone is passing urine. There are a number of causes of kidney stones, and anyone with kidney stones should have some investigations to find the cause in their case, so that measures can be taken to reduce the risk of stones in the future.

- c. Loin pain haematuria syndrome.** There is a rare condition, or group of conditions, called 'loin pain haematuria syndrome'. The causes of loin pain haematuria syndrome are not fully understood, and the treatments for it are not very satisfactory.
- d. Other conditions.** Many other types of kidney disease can cause some pain in the kidneys, and there is not enough space to list each one. However, if you have a diagnosis from your doctor, there may be more information on the NKF website that will help you, or you could contact the Helpline on 0845 601 02 09.

Management of persistent pain and psychological effects of pain

Most people with kidney pain get better with treatment (eg treatment of infection or removal of a stone). However, some people do get long term (chronic) pain. Pain that will not go away is one of the worst medical problems anyone can have. There are a number of ways that someone can try to deal with pain. One is to have a satisfactory diagnosis and plan of treatment from a specialist. However, even with the help of drugs, a

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The NKF - the largest Kidney Patient charity in the UK

A federation of more than fifty patient charities, supporting kidney patients & carers

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