

Procedure Specific Information Sheet

Ureteroscopy and laser of stone

What is an ureteroscopy?

An ureteroscopy is an operation to treat stones in your kidneys and ureters (tubes that carry urine from your kidneys to your bladder). An ureteroscopy can also be performed to help diagnose problems in your kidneys and ureters such as a blockage or a tumour.

Dr Vasudevan has recommended an ureteroscopy. However, it is your decision to go ahead with the operation or not.

This document will give you information about the benefits and risks to help you to make an informed decision. If you have any questions that this document does not answer, ask Dr Vasudevan.

What problems can a stone cause?

Most people have two kidneys, which make urine by filtering waste and excess fluid from your bloodstream. Urine normally drains from your kidneys into your bladder through small muscular tubes call ureters.

Stones are common and usually do not cause any problems. Most kidney stones are small and stay in your kidneys without blocking the flow of urine. If a stone dislodges and passes down a ureter it can cause severe pain.

Sometimes a stone blocks your ureter, causing urine to build up in your kidney, increasing the risk of your kidney being damaged. A blocked ureter can cause serious kidney infections. If both your ureters are blocked, or you have only one kidney that is working, you can develop kidney failure.

Kidney failure causes major life-threatening problems because waste will not be removed from your bloodstream. Your kidneys will not be able to carry out vital functions such as regulating your blood pressure.

What are the benefits of surgery?

You should get relief from pain, and have less risk of infection or your kidney being damaged. If Dr Vasudevan is performing an ureteroscopy to help diagnose problems in your ureter or kidney, he may perform a biopsy (removing small pieces of tissue), or he may be able to treat the problem using the ureteroscope.

Are there any alternatives to an ureteroscopy?

Sometimes it is possible to pass a stone naturally. This involves drinking plenty of water and taking painkillers. Treatment is usually recommended only if the stone is too large, or there is a risk of infection or your kidney being damaged.

An extracorporeal lithotripsy uses a device to pass energy through your skin to divide the stones into fragments. However a lithotripsy may not be suitable for treating your stones.

It is possible to have open surgery which involves a cut on your side but there is a higher risk of complications.

What will happen if I decide not to have the operation?

If you have a stone that is blocking a ureter, it is likely that your ureter will stay blocked and your kidney will become permanently damaged. The risk is higher if your kidney is already infected. If Dr Vasudevan is concerned that you may have a problem in your ureters or kidney, he may not be able to confirm what the problem is.

If you decide not to have an ureteroscopy, you should discuss this carefully with Dr Vasudevan.

What does the operation involve?

The operation is performed under a general or spinal anaesthetic. Your anaesthetist will discuss the options with you and recommend the best form of anaesthesia for you. You will be given antibiotics during the operation to reduce the risk of infection. The operation usually takes about an hour.

Dr Vasudevan will use x-rays to guide him while he performs your ureteroscopy.

Dr Vasudevan will pass a rigid telescope (cystoscope) into your urethra (tube that carries urine from your bladder). He will use the cystoscope to check for any problems in your bladder.

Dr Vasudevan will pass a guidewire (thin flexible wire) down the cystoscope, into your bladder and then into the opening of your ureter. He will remove the cystoscope and, using the guidewire will insert the ureteroscope into your ureter (see figure 1)

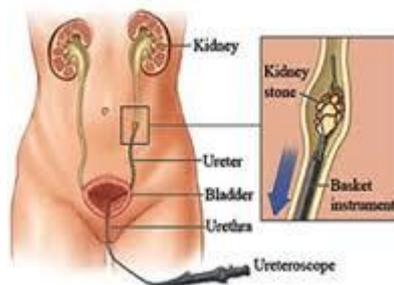


Figure 1.
Ureteroscopy

Dr Vasudevan will use the ureteroscope to find the stone. He will use a laser to break the stone into smaller pieces. Dr Vasudevan will either leave the pieces to pass naturally or remove the stones using the ureteroscope. Sometimes he will insert a stent (tube) into your ureter to keep it open.

Dr Vasudevan may place a catheter (tube) in your bladder to help you to pass urine.

What should I do about my medication?

Let Dr Vasudevan know about all medication you take and follow his advice. This includes all blood-thinning medication as well as herbal and complementary remedies, dietary supplements, and medication you can buy over the counter.

What can I do to help make the operation a success?

If you smoke, stopping smoking several weeks or more before the operation may reduce your risk of developing complication and will improve your long-term health.

Try to maintain a healthy weight. You have a higher risk of developing complication if you are overweight.

Regular exercise should help to prepare you for the operation, help you to recover and improve your long-term health.

What complications can happen?

Dr Vasudevan will try to make the operation as safe as possible but complications can happen. Some of these can be serious and can even cause death. You should ask Dr Vasudevan if there is anything you do not understand. Dr Vasudevan may be able to tell you if the risk of a complication is higher or lower for you.

1. Complications of anaesthesia

Your anaesthetist will be able to discuss with you the possible complication of having an anaesthetic.

2. General complications of any operation

- Pain is usually only mild and easily controlled with simple painkillers such as paracetamol. However, you can sometimes get severe pain which is usually controlled with strong painkillers. You may get kidney pain if a stone was treated but this usually settles over a few days. If you have a stent, you may get some soreness and bladder irritation until the stent is removed.
- Bleeding after the operation. Any bleeding is usually little but you may notice traces of blood in your urine for a few weeks. If you continue to pass blood clots and blood in your urine, contact Dr Vasudevan.
- Infection. If you need to pass urine often and pass only small amounts with a great deal of discomfort, you may have an infection. If your symptoms continue to get worse, contact Dr Vasudevan. You may need treatment with antibiotics.

3. Specific complications of this operation

- Failure of the procedure, if there are technical difficulties inserting the ureteroscope into your ureter Dr Vasudevan will use the cystoscopy to insert a stent into your ureter to help prevent your kidney from being damaged.
- Damage to your ureter (risk: 2 in 100). Sometimes small holes can be made. Dr Vasudevan will insert a stent in your ureter and the holes usually heal over in time. If the damage is severe and Dr Vasudevan cannot repair your ureter, they will need to remove your kidney. This is very rare.
- Narrowing of your ureter, due to scar tissue caused by the stone or damage caused by the ureteroscope (risk: 1 in 100). If the narrowing is severe or your ureter blocks, you may need another operation to treat the narrowing.
- Blocking of your ureter caused by a piece from a stone shattered by a laser (risk: 3 in 100). You may need another operation to treat the stone, or a procedure to drain urine from your kidney.

How soon will I recover?

• In Hospital

After the procedure you will be transferred to the recovery area where you can rest. If you are given strong painkillers, drink plenty of fluid and increase the amount of fibre in your diet to avoid constipation.

You should be able to go home the same day, after you have recovered from the anaesthetic and passed urine. However, Dr Vasudevan may recommend that you stay a little longer. If you do go home the same day, a responsible adult should take you home in a car or taxi and stay with you for at least 24 hours. Be near a telephone in case of an emergency.

- **Returning to normal activities**

Do not drive, operate machinery or do any potentially dangerous activities (this includes cooking) for at least 24 hours and not until you have fully recovered feeling, movement and co-ordination. If you had a general anaesthetic or sedation, you should also not sign legal documents or drink alcohol for at least 24 hours. You may get a little stinging the first few times you pass urine. Drink plenty of water to help you to pass urine and any pieces of shattered stones more easily.

Do not do strenuous exercise for at least two days. You should be able to return to work after about a week.

Regular exercise should help you to return to normal activities as soon as possible.

Do not drive until you are confident about controlling your vehicle and always check your insurance policy.

- **The future**

If you have a stent, Dr Vasudevan will usually be able to remove it after about 2 weeks but it may need to stay in place for longer. The procedure is performed under a local anaesthetic using a flexible cystoscope.

If the stent is not removed within six months, contact Dr Vasudevan. Any longer than six months and the stent will be difficult to remove.

If your ureteroscopy was performed to help diagnose a problem, Dr Vasudevan will tell you what was found and discuss with you any treatment or follow-up you need. Results from biopsies will not be available for 2 weeks so please ring Dr Vasudevan's office to arrange an appointment to discuss the results.

Summary

A stone in a kidney or ureter can cause severe pain, infection and kidney damage. An ureteroscopy should treat a stone and help to find out if you have any problems in your kidneys and ureters.

Surgery is usually safe and effective but complications can happen. You need to know about them to help you make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.