British Society of Interventional Radiology
The Royal College of Radiologists
63 Lincoln's Inn Fields
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Renal Cyst Scleroptherapy

This information sheet explains about the procedure to treat a renal cyst with sclerotherapy. It describes what the procedure involves, the risks, and what to expect when you come to the Interventional Radiology department for treatment.

Please note that this leaflet is not meant to replace discussion between you and your doctor. You should raise any questions you may have with the doctor who has referred you for, or is performing, the procedure.

What is renal cyst sclerotherapy?

Renal cysts are sacs of fluid that form in the kidney and are very common. Most cysts are completely benign and do not cause symptoms or harm, and many people may never know they have them. Sometimes cysts can grow very large and cause symptoms by pressing on surrounding structures.

It is then possible to drain the cyst by placing a needle into it to see if the symptoms go away, however usually cysts refill with fluid after a few weeks/months. If this happens and the symptoms return, a medicine called a sclerosant can be injected into the cyst to help prevent it from producing more fluid and returning.

Why do I need renal cyst sclerotherapy?

If there is improvement in symptoms following drainage of a renal cyst but these return as the cyst refills, this implies it is the underlying cause of the symptoms. Renal cyst sclerotherapy is a minimally invasive way of treating the cyst. The alternative is a surgical procedure to remove the cyst.

How do I prepare for renal cyst sclerotherapy?

Renal cyst sclerotherapy is a simple procedure and can safely be performed without the need to put you to sleep. Most patients tolerate the procedure with just local anaesthetic.

How is renal cyst sclerotherapy performed?

The procedure involves inserting a needle through the skin and into the cyst using ultrasound or sometimes CT to guide the needle into place. Once the needle is inside the cyst, a wire is passed into the cyst and then a plastic drainage tube inserted into it. The fluid contents are then drained out and some dye injected to make sure there is no connection between the cyst and the kidney. Sclerosant agent is then injected into the cyst which helps stick the walls of the cyst together to prevent the fluid reaccumulating. Sometimes the sclerosant agent is left in for a period of time before being drained. The drain can then be removed leaving only a tiny hole a few millimeters in size which will heal up naturally. There is no need for sutures.

Who performs the procedure and where?

The procedure is performed by an Interventional Radiologist, who is a specialist doctor who performs minimally invasive, image guided surgery. This will usually be done in an interventional radiology suite which is an operating theatre equipped with specialist X-ray equipment, usually in the radiology (X-ray) department. There will be a team involved in your care including nurses and radiographers.

What are the potential risks/complications of renal cyst sclerotherapy?

The procedure is very safe as the needles and tubes used are very small but there is a small risk of bleeding when the needle is inserted into the cyst. Some people may notice blood in the urine after the procedure, but this should settle within a few days. This usually settles on its own. There is also a small risk of infection but this can be treated with antibiotics if required. Despite using a sclerosant agent, there is a risk the cyst refills with fluid after the procedure or another cyst grows elsewhere and the symptoms would therefore return. One of the sclerosants used for this procedure is a very pure form of alcohol and this can cause some intoxication or pain if it leaks from the cyst during the procedure. If a small connection to the kidney is present and not seen, sclerosant can cause damage to the kidney or tube that connects the kidney to the bladder. This is very rare but can be serious and require further procedures.

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What happens afterwards?

Renal cyst sclerotherapy is usually performed as a day case procedure and there should be no need for you to stay in hospital after the procedure unless there is a complication. It is advisable that someone takes you home and stays with you overnight on the day of the procedure. If the procedure is a success and the symptoms go away, there is usually no need for further follow up unless the symptoms return.

Notes