York and Scarborough Teaching Hospitals
NHS Foundation Trust

Ureteroscopy (Rigid and Flexible) and Insertion of a JJ Stent

Information for patients, relatives and carers

Department of Urology
York and Scarborough Teaching Hospital NHS Foundation Trust

ⓘ For more information, please contact the hospital where you are being treated:

For York Hospital:

Tel: 01904 725985

For Scarborough/Bridlington Hospitals:

Urology Nurse Practitioners Telephone: 01723 385246

Urology Secretaries Telephone: 01723 342437

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Ureteroscopy and Insertion of JJ Stent

The following information is a guide as to what to expect with this procedure. The procedure is designed to allow as minimal as possible access to the ureter and kidney. It does not involve a traditional ‘surgical incision’ which means the effect on the body is less and recovery should be quicker. It is largely because of the development of newer digital telescopes that this type of surgery is now possible.

Everyone is different and recovers at different rates therefore it is impossible to put everything in writing. This leaflet covers the most common questions patients have about the procedure and their recovery and aims to give you some reassurance as to what can normally be expected.

What should I expect before the procedure?

You will usually be admitted on the same day as your surgery. You will normally receive an appointment for pre-assessment to assess your general fitness, to screen for the carriage of MRSA and to perform some baseline investigations. After admission, you will be seen by members of the medical team which may include the Consultant, Specialist Registrar, Foundation Doctor and your named nurse. An X-ray or limited CT scan may be performed just before your surgery to confirm the position of your stone(s).

You will be asked not to eat or drink for six hours before surgery and, immediately before the operation, you may be given a pre-medication by the anaesthetist which will make you dry-mouthed and pleasantly sleepy.

You should also receive a leaflet on what you can expect when you come to hospital for surgery.

At some stage during the admission process, you will be asked to sign the second part of the consent form (FYCON101-1 Diagnostic Ureteroscopy or FYCON69-1 Ureteroscopic stone removal) giving permission for your operation to take place, showing you understand what is to be done and confirming that you wish to proceed. Make sure that you are given the opportunity to discuss any concerns and to ask any questions you may still have before signing the form.

What does this operation involve?

Ureteroscopy is an operation on the ureter, which is the tube that carries urine from the kidney to the bladder. The operation is usually carried out under a general anaesthetic (where you are put to sleep). You will usually be given injectable antibiotics before the procedure, after checking for any allergies. A telescope is inserted into the bladder through the water pipe (urethra). Under X-ray screening, a flexible guidewire is inserted into the affected ureter up to the kidney. A longer telescope (either rigid or flexible - the 'ureteroscope') is then inserted into the ureter and passed up to the kidney.

There are many medical reasons why this operation is performed, but the commonest is stones. If it is a stone then this is disintegrated using a mechanical probe or laser and the fragments, if necessary, are extracted with special retrieval devices. A ureteric stent is normally left in place, together with a bladder catheter, after the procedure. Occasionally a plastic tube (JJ stent) may be left in the ureter depending on the indication for the operation. This is a hollow plastic tube approximately 30 cm long, and when it is in place the top and bottom ends coil up in the shape of a "J". The top end then sits in the kidney and the bottom end sits in the bladder, so that urine can flow down it, protecting the kidney.

What are the benefits of having an Ureteroscopy and Insertion of a JJ Stent?

If ureteroscopy is used for treatment purposes, like stones, then the intended benefits are the relief of any symptoms relating to these conditions like pain, bleeding and infection. Even if you don't suffer from any symptoms the removal of any ureteric stones will avoid future complications like an obstructed kidney, infection, bleeding and pain.

Ureteroscopy can also be used for diagnostic purposes within the ureter and sometimes within the kidney. At the same time tissue samples can be taken for analysis if it is felt necessary. This is useful when other investigations are inconclusive.

Insertion of a JJ stent is only temporary and is mainly used to relieve ureteric obstruction of any cause. It is sometimes put in after stone removal to keep the ureter open while you are recovering from the operation. In rare cases the JJ stent may need to be changed periodically (usually every six months).

Are there any risks of having an Ureteroscopy and Insertion of a JJ Stent?

The following list outlines the risks associated with this procedure. Your surgeon will be happy to discuss these in more detail:

Common (Greater than 1 in 10)

- Mild burning or bleeding on passing urine for a short period after operation.
- Temporary insertion of a bladder catheter.
- Insertion of a stent with further procedure to remove it.
- The stent may cause pain, frequency and bleeding in the urine.
- No guarantee of a cure as is often a diagnostic procedure only.

Occasional (Between 1 in 10 and 1 in 50)

- Inability to get the stone or movement of the stone back into kidney where it is not retrievable.
- Kidney damage or infection needing further treatment.
- Failure to pass the telescope if the ureter is too narrow.
- Recurrence of the stones.

Rare (Less than 1 in 50)

- Damage to the ureter with the need for an open operation or a tube placed into the kidney directly from back to allow any leak to heal.
- Finding a cancer requiring additional therapy at a later date (biopsies may be taken for analysis).
- Very rarely, scarring or stricture of the ureter requiring further procedures.
- Very rarely (less than 1%) damage to surrounding structures such as blood vessels, bowel.

Hospital-acquired infection

- Colonisation with MRSA (0.9% - 1 in 110)
- Clostridium Difficile bowel infection (0.2% - 1 in 500)
- MRSA bloodstream infection (0.08% - 1 in 1250)

What are the alternatives to having an Ureteroscopy and Insertion of a JJ Stent?

Alternatives to ureteroscopy, especially for stones, are observation; external shock wave lithotripsy (ESWL – shocks waves produced by an external machine generator and targeted onto the stone through the skin) or chemical dissolution, but all of these will have a much lower success rate; alternative x-ray investigations.

Laparoscopic (keyhole surgery) or open surgery are alternatives, but these are much more invasive and carries a much higher complication rate when compared to ureteroscopy.

What should I expect after the operation?

Post operatively it is very common to have quite severe pain in the kidney region. Regular over-the-counter paracetamol and ibuprofen, provided it's safe for you to take these medications, can help.

This pain should go after a few hours, but it may take up to 72 hours due to the swelling cause by the insertion of the instrument or the presence of a stent.

It is also very common to pass blood in the urine after the procedure and this also settles after 24 - 72 hours.

If a ureteric catheter has been put in this is usually removed by the following day together with the bladder catheter.

If a JJ stent has been left in the kidney, this may be removed by the Urology Team at a point after surgery. This could vary depending on the reason why the stent was used.

We may want the stent to remain for a period of weeks or months, in which case it will be removed by passing an instrument up into the bladder. This will be performed in Theatres under either a general or local anaesthetic. This will be discussed with you.

Most patients are discharged on the day of surgery, but occasionally you may be required to stay in hospital following your operation

You may be advised on a 7 day recovery period after the procedure, with a phased return to work and usual activities / exercise during this time.

What is “Stent on a String”?

Sometimes the suture or ‘stitch’ on the stent, which is attached following the stents manufacturing, is kept in place on the stent.

You may see this ‘stitch’ passing out from the urethra. It’s normally taped to the upper leg.

The advantage of this is mainly to avoid another invasive procedure to remove the stent. You would normally be advised on when this needs to be removed by the Urology Team.

Will I experience any side effects from the JJ stent being left in?

Patients who have a stent left in place do often get side effects. Bleeding in the urine is quite common especially after exercise, and is nothing to worry about and you can certainly take exercise and go back to work even with the tube inside you. Bladder problems can occur as the bottom end of the JJ stent irritates the bladder causing frequency, urgency and discomfort in the bladder, these symptoms are very much like cystitis and in fact it is often very difficult to differentiate between the two. Some patients get pain in the kidney region, particularly when emptying the bladder, this is nothing to worry about and will not damage the kidney.

You should seek advice from your own doctor (GP) or practice nurse if you experience any of the following:

- You feel generally unwell or feverish
- It is very painful to pass urine

How much am I allowed to drink after my operation?

Following your discharge from hospital you are advised to drink twice as much as you normally do or between two to three litres of non-alcoholic fluid (in addition to any alcohol you chose to drink) for the next seven days. This will help reduce the risk of developing a urinary tract infection and clear any small blood clots.

Will my bowels be affected by the operation?

Painkillers containing codeine can cause constipation. If you find this is a problem and you are taking your painkillers regularly, then you need to have a chat with your doctor. Don't stop taking the painkillers. If you still have pain, your doctor will suggest an alternative and or a mild laxative to help. Ensuring that you are pain free is important for your recovery. Added to this and due to the change in your normal routine, you may experience a change in your bowel habit. This could take several days to return to normal.

Tips:

- Drink plenty of fluids.
- Try to eat a high fibre breakfast cereal and wholemeal bread.

When can I return to my normal activities?

What you can or can't do after your operation will depend upon your usual level of activities and general health. A useful guide is "listen to your body" it will let you know your limitations. If you try something and it hurts, stop, and try again in a few days.

When can I return to my leisure and domestic activities?

It is important that you do something. Sitting or lying around all day can hinder your recovery and can lead to problems such as formation of blood clots in your legs. Walking is good for recovery after most operations, try a short distance at first and then increase day by day. Remember listen to your body, it will tell you when you've had enough. Rest throughout the day as and when you feel tired. You may find this disturbs your night time sleeping, but it is important to respond to your body, and not wait until you're completely exhausted.
There are no restrictions to your domestic, leisure or sporting activities. Aim to return to your daily activities gradually by doing a little more each day.

When can I return to having sex?

You can return to your usual sexual activities once you feel able to without too much pain and discomfort.

When can I return to driving?

You do not normally need to notify the DVLA unless you have a medical condition that will last for longer than three months after your surgery and may affect your ability to drive. The authorities (DVLA), however, state that “it is the responsibility of the driver to ensure that he or she is in control of the vehicle at all times’’. Therefore you will be able to drive as soon as it is comfortable for you to sit for a period of time and have free range of movement in your arms, legs, neck and tummy. You should be confident with all movements needed including an emergency stop. You should, however, check with your insurance company before returning to driving.

However, driving after surgery should be decided following discussion with your doctor and it is also suggested that you check your cover with your insurance company.

When can I return to work?

This is again very dependent upon your job. It will take at least 10 days to recover fully from the operation. You should not expect to return to work within seven days. If you require a sick note, please ask the ward staff and the doctor will supply one.

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:
Mr Khafagy, Consultant Urological Surgeon, Urology Department, The York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 725985.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email yhs-tr.patientexperienceteam@nhs.net.

An answer phone is available out of hours.

Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website: www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/

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