NHS
Royal Cornwall Hospitals
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Cystolitholapaxy – endoscopic destruction and removal of bladder stone

affix patient label

What does this involve?

This procedure involves crushing or disintegrating bladder stone(s) using telescopic fragmentation devices or a laser passed through your urethra (water pipe). Once the stone has been broken up, the small fragments produced are removed using suction.

Why do I need this?

This procedure is performed if you have bladder stones. Occasionally, this procedure may also be required if you have a retained foreign body in your bladder for example an encrusted ureteric stent or urinary catheter.

Are there any alternatives?

- Observation ('doing nothing') – this carries a risk of pain, bleeding and infection.
- Open surgery – cutting into the abdomen and opening the bladder directly to remove the stone. This will require a catheter to drain your bladder for up to two weeks.

What happens before the procedure?

If this is a planned (elective) operation

- You will usually be admitted to hospital on the same day as your surgery. You will normally receive an appointment for a 'pre-assessment' to assess your general fitness, screen you for MRSA and do some baseline investigations.
- Once you have been admitted, you will be seen by the surgeon performing the operation, and asked to complete the consent form. You will be asked not to eat and drink for **six hours** before surgery. Immediately before your operation, the anaesthetist may give you a pre-medication which will make you dry-mouthed and pleasantly sleepy.

If this is an emergency operation

- The operating surgeon will see you on the ward and explain the reason for the procedure, and go through the consent form with you.
- An anaesthetist will see you to discuss the options of a general anaesthetic or spinal anaesthetic. The anaesthetist will also discuss pain relief after the procedure with you.
- When you are admitted to hospital, you will be asked to sign the second part of your operation consent form giving permission for your operation to take place, showing you understand what is to be done and confirming that you want to go ahead. Please feel free to discuss any concerns and ask questions prior to signing.

What does it involve?

1. We use either a general anaesthetic (where you will be asleep) or a spinal anaesthetic (where you will be unable to feel anything from the waist down).
2. We usually give you an injection of antibiotics before the procedure, after you have been checked for any allergies.
3. We put a telescope into your bladder through your urethra (water pipe) to inspect the urethra and the inner lining of your bladder.

4. We wash out small stones through the telescope.
5. We break up larger stones using a crushing instrument, laser energy or a mechanical disintegration device.
6. Stone fragments are then removed using simple suction.
7. We may put in a bladder catheter, which is removed after one to three nights.
8. The procedure takes between 15 to 60 minutes to perform.
9. You may be discharged the same day for straightforward stones, or may stay between 1 to 3 days for larger, more complex stones.

What happens afterwards?

You will usually be allowed home once you have passed urine satisfactorily and feel comfortable. If your procedure is performed under a general anaesthetic, we will observe you for a few hours to ensure you have regained full consciousness and are stable. You will usually go home a few hours after surgery.

Are there any risks or complications?

As with all procedures, there are risks from having this procedure. You should be reassured that, although these complications are well recognised, the majority of patients do not suffer any significant problems after this procedure.

Almost all patients

Mild burning on passing urine for a short time after the procedure.

Common (greater than 1 in 10)

- Infection of the bladder requiring antibiotic treatment.

Between 1 in 10 & 1 in 50 patients

- Bleeding for a few days after the procedure.
- Failure to remove all the stones (or stone fragments) requiring a repeat procedure.

Rare (between 1 in 50 to 1 in 250 patients)

- Anaesthetic or cardiovascular problems possibly requiring intensive care (including chest infection, pulmonary embolus, stroke, deep vein thrombosis, heart attack and death). Note: mainly applies to procedures performed under general anaesthetic.
- Injury to the urethra resulting in scarring which may require further surgery.
- Perforation of the bladder requiring open surgical exploration and repair.

Hospital-acquired infection

- Colonisation with MRSA (0.9% - 1 in 110)
- Clostridium difficile bowel infection (0.01% - 1 in 10,000)
- MRSA bloodstream infection (0.02% - 1 in 5000)

The rate for hospital-acquired infection may be greater in high-risk patients, for example those patients:

- with long-term urinary catheters
- who have had a long stay in hospital/multiple hospital admission.

What happens when I am discharged?

- You will be given advice about your recovery at home.
- When you leave hospital, you will be given a 'draft' discharge summary. This contains important information about your stay in hospital and your operation. If you need to call your GP or if you need to go to another hospital, please take this summary with you so the staff can see the details of your treatment.
- Any antibiotics or other tablets you may need will be arranged and dispensed from the hospital pharmacy.

What should I expect when I get home?

- For the first 24 to 48 hours drink twice as much fluid as you would usually, to flush your system through and reduce the risk of infection.
- Passing urine may be painful at first and the urine you pass may be slightly bloodstained – this should settle within a few days.
- You may return to work when you are comfortable enough.

Will I need any follow up?

Follow up will depend on the reason you developed the bladder stone in the first place. Your Urologist will decide this and either inform you after the procedure or mention this in your discharge summary. Any follow up will then be arranged for you.

What should I look out for?

if you develop a fever, frequent passage of urine, severe pain on passing urine, inability to pass urine or worsening bleeding, contact your GP immediately.

Any questions?

If you have any questions please contact the Urology department on 01872 252220.

If you would like this leaflet in large print, Braille, audio version or in another language, please contact the General Office on 01872 252690