

Cystoscopy and crushing of a bladder stone (Litholapaxy)

Department of Urology

What is the evidence base for this information?

This publication includes advice from consensus panels, the British Association of Urological Surgeons, the Department of Health and evidence-based sources. It is, therefore, a reflection of best urological practice in the UK. It is intended to supplement any advice you may already have been given by your GP or other healthcare professionals. Alternative treatments are outlined below and can be discussed in more detail with your Urologist or Specialist Nurse.

What does the procedure involve?

This procedure involves crushing or disintegration of bladder stone(s) using telescopic instruments or laser and removal of the stone fragments using suction apparatus.

What are the alternatives to this procedure?

Open surgery, observation.

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, House Officer and your named nurse.

You will be asked not to eat or drink for 6 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.

Please be sure to inform your surgeon in advance of your surgery if you have any of the following:

- an artificial heart valve
- a coronary artery stent
- a heart pacemaker or defibrillator
- an artificial joint
- an artificial blood vessel graft
- a neurosurgical shunt
- any other implanted foreign body
- a regular prescription for Warfarin, Aspirin or Clopidogrel (Plavix®)
- a previous or current MRSA infection
- a high risk of variant-CJD (if you have received a corneal transplant, a neurosurgical dural transplant or previous injections of human-derived growth hormone).

At some stage during the admission process, you will be asked to sign the second part of the consent form 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 happens during the procedure?

Either a full general anaesthetic (where you will be asleep throughout the procedure) or a spinal anaesthetic (where you are awake but unable to feel anything from the waist down) will be used. All methods minimise pain; your anaesthetist will explain the pros and cons of each type of anaesthetic to you.

You will usually be given injectable antibiotics before the procedure, after checking for any allergies.

A special telescope is inserted into the bladder to see the stones. These are then broken up using a crushing instrument, a mechanical disintegration probe or a laser. The stone fragments are removed from the bladder and a catheter inserted.

What happens immediately after the procedure?

In general terms, you should expect to be told how the procedure went and you should:

- Ask if what was planned to be done was achieved
- let the medical staff know if you are in any discomfort
- ask what you can and cannot do
- feel free to ask any questions or discuss any concerns with the ward staff and members of the surgical team
- ensure that you are clear about what has been done and what is the next move.

The catheter will be removed within 24-48 hours following which you will be able to pass urine normally. Some burning, frequency of urination and bleeding are common within the first 24-48 hours after catheter removal.

It is not unusual for a plain x-ray of your abdomen to be performed on the day after surgery to confirm that all the stone fragments have been removed.



Are there any side-effects?

Most procedures have a potential for side-effects. You should be reassured that, although all these complications are wellrecognised, the majority of patients do not suffer any problems after a urological procedure.

Common (greater than 1 in 10)

- Mild burning or bleeding on passing urine for short period after operation
- Temporary insertion of a catheter
- Need for an additional procedure (e.g. resection of the prostate gland) if this is thought to be the cause of the stone formation.

Occasional (between 1 in 10 and 1 in 50)

- Infection of bladder requiring antibiotics
- Permission for telescopic removal/ biopsy of bladder abnormality/ stone if found
- Recurrence of stones or residual stone fragments.

Rare (less than 1 in 50)

- Delayed bleeding requiring removal of clots or further surgery
- Injury to the urethra causing delayed scar formation
- Very rarely, perforation of the bladder requiring a temporary urinary catheter or return to theatre for open surgical repair.
- 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).

The rates for hospital-acquired infection may be greater in highrisk patients e.g. with long-term drainage tubes, after removal of the bladder for cancer, after previous infections, after prolonged hospitalisation or after multiple admissions.

What should I expect when I get home?

By the time of your discharge from hospital, you should:

- be given advice about your recovery at home
- ask when to resume normal activities such as work, exercise, driving, housework and sexual intimacy
- ask for a contact number if you have any concerns once you return home
- ask when your follow-up will be and who will do this (the hospital or your GP)
- ensure that you know when you will be told the results of any tests done on tissues or organs which have been removed.

When you leave hospital, you will be given a 'draft' discharge summary of your admission. This holds important information about your inpatient stay and your operation. If you need to call your GP for any reason or to attend another hospital, please take this summary with you to allow the doctors to see details of your treatment. This is particularly important if you need to consult another doctor within a few days of your discharge.



When you get home, you should drink twice as much fluid as you would normally for the next 24-48 hours to flush your system through. You may find that, when you first pass urine, it stings or burns slightly and it may be lightly bloodstained.

What else should I look out for?

If you develop a fever, severe pain on passing urine, inability to pass urine or worsening bleeding, you should contact your GP immediately.

Are there any other important points?

A follow-up appointment will be arranged before your discharge from hospital. If you have any concerns about the timing of further treatment, please discuss this with your named nurse or Consultant.

Driving after surgery

It is your responsibility to ensure that you are fit to drive following your surgery. You do not normally need to notify the DVLA unless you have a medical condition that will last for longer than 3 months after your surgery and may affect your ability to drive. You should, however, check with your insurance company before returning to driving. Your doctors will be happy to provide you with advice on request.

Is there any research being carried out in this area?

Before your operation, your surgeon or Specialist Nurse will inform you about any relevant research studies taking place, and, in particular, if any surgically-removed tissue may be stored for future study. If this is the case, you will be asked if you wish to participate and, if you agree, to sign a special form to consent to this.

All surgical procedures, even those not currently the subject of active research, are subjected to rigorous clinical audit so that we can analyse our results and compare them with those of other surgeons. In this way, we can learn how to improve our techniques and our results; this means that our patients will get the best treatment available.



Who can I contact for more help or information?

For further information on the internet, here are some useful sites to explore:

www.rcseng.ac.uk/patient_information/internet_sources

www.patient.co.uk

www.patientinformation.org.uk

www.rcoa.ac.uk (for information about anaesthetics)

www.prodigy.nhs.uk.PILs

www.nhsdirect.nhs.uk

www.besttreatments.co.uk

Useful telephone numbers:

The Urology Nursing Team 01444 441881 Ext. 65457

Email uhsussex.urologyclinicalnursingteam@nhs.net

Urology consultants:

 Mr Coker's secretary
 01444 441881 Ext. 68043

 Mr Crawford's secretary
 01444 441881 Ext. 65962

 Mr Symes' secretary
 01273 696955 Ext. 67809

 Mr Larner's secretary
 01273 696955 Ext. 67808

 Mr Alanbuki's secretary
 01273 696955 Ext. 67810

 Mr Zakikhani's secretary
 01273 696955 Ext. 67809

This leaflet is intended for patients receiving care in Brighton & Hove or Haywards Heath

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