

Your treatment to remove pancreatic duct stones (Lithotripsy)

You have been referred for lithotripsy of your pancreatic stones. This leaflet will give you more information about lithotripsy and help you prepare for your procedure. Please read this at least one week before your appointment.

Key points

- Lithotripsy is a non-invasive procedure that breaks down large stones in the pancreas using shockwaves
- Some stones are hard to break up and may require multiple treatments
- The most common side effect of lithotripsy is temporary abdominal pain
- Stone fragments in the pancreatic duct are then removed in a second appointment with an endoscope in a procedure called ERCP
- You will need to take peppermint oil capsules the three days prior to procedure
- You will be admitted the night before and after the lithotripsy

What is Lithotripsy?

Lithotripsy is a non-invasive procedure in which shockwaves (pulses of energy) are used to break down stones in the pancreas and biliary system. Lithotripsy can also be referred to as Extracorporeal Shock Wave Therapy (ESWL).

The shockwaves are produced by a special machine (called a 'lithotripter'). The shockwaves pass through the skin to break down stones into smaller fragments. Ultrasound and X-ray is used to help guide the shockwaves. These fragments can then be removed in a separate procedure called endoscopic retrograde cholangio-pancreatography (ERCP) a few weeks later.

ERCP is a minimally invasive procedure where the doctor inserts a narrow flexible tube with a camera (endoscope) into the mouth and down into the stomach to remove the fragments. You will be contacted separately about your ERCP.

Why do I need lithotripsy treatment?

Your doctor has recommended that you have lithotripsy treatment to break down the stones you have in your pancreatic duct (the tube that drains from the pancreas into the bowel). These pancreatic stones are often caused by chronic pancreatitis and can cause significant pain and problems digesting foods if left untreated. The procedure has good success rates of stone removal and the majority of patients have a reduction or complete resolution of their pain¹.

What happens on the day of my appointment?

Please do not eat anything after midnight the night before the procedure. This stops you feeling sick during the sedation and helps us to visualise the stones. Clear fluids (water) and normal medications are allowed.

We will give you a phosphate enema (a laxative placed into your rectum via your back passage) two hours before the procedure. The enema will clear your bowels of gas and stool which can block the view of the stones during the lithotripsy treatment.

The session normally lasts 30-45 minutes and you will be asked to lie face down for the treatment. Please let us know if you will not be able to tolerate this in advance of the procedure.

You will be awake during the procedure and so will be able to hear and feel the Lithotripter working. The X-ray machine will be used to help locate the stone(s). The sensation is similar to that of being flicked with a rubber band and you may have some discomfort at the treatment area.

Please tell the doctor if you have severe discomfort so that s/he can either stop the treatment for a few minutes or give you some medication to make you more comfortable.

Where should I go for my appointment?

Please come to **Hammersmith Hospital the afternoon before the procedure.** You will be **admitted overnight** and reviewed by a healthcare professional. We will do some routine blood tests before the lithotripsy the following day at Charing Cross Hospital.

What happens afterwards?

We will arrange transport for you to and from Charing Cross Hospital for your treatment. We will monitor you on the ward after the procedure and you will be reviewed by a doctor.

Please plan to stay overnight after lithotripsy, however you may be able to go home the same evening depending on the medical review. Please **do not drive** or operate heavy machinery **for 24 hours** due to the sedation used in the procedure

What are the risks and benefits of having lithotripsy treatment?

The benefits of lithotripsy are that it is a relatively safe procedure and does not require general anaesthesia. It also has a high success rate in breaking down these stones.

All treatments and procedures have risks and your doctor will discuss these with you. The main risks or complications with Lithotripsy can include:

- Temporary abdominal pain
- Skin irritation on the abdomen
- Needing further lithotripsy sessions to break down the stones
- Needing further ERCP attempts to remove the stones
- Recurrence of stones
- Inflammation of the pancreas (acute pancreatitis) which may require hospital admission for fluids and pain relief
- Bleeding or bruising around the pancreas and abdomen
- Injury to other abdominal organs (this happens for less than 0.5% patients²)

Your doctor may advise against ESWL Lithotripsy if you:

- Are pregnant
- Have a pacemaker or another implanted device that can be disrupted by the shock waves
- Take blood thinners that cannot be stopped or have a bleeding disorder such as haemophilia
- You have any swollen abdominal vessels such as enlarged abdominal aorta
- Please inform us if you have any of the above conditions and we will discuss treatment options.

Are there any alternatives to this treatment?

Alternatives to this procedure is attempting ERCP without lithotripsy or having no treatment. You have been recommended for this treatment as your clinician thinks it is advisable to break down the stones first and reduce the risk of the following ERCP.

Is there anything I need to do before my appointment?

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Please take colpermin (peppermint) capsules for the 3 days leading up to the procedure. You can buy these from most pharmacies or health food shops. These reduce bowel gas and mean the urologist can see the stone better on the X-ray.

Please take all your medications as usual, but if you are taking blood-thinning medications, such as warfarin, apixaban, dabigatran, clopidogrel or aspirin, you must inform us of this when you receive your appointment. Do not stop taking your medication until advised to do so.

Special note for female patients

You may still continue your treatment if you are having your period. However, you must tell us if you are pregnant or think you may be pregnant, as this treatment will not be suitable for you. Your doctor will discuss an alternative treatment appropriate to your condition with you.

What to bring to your appointment

Is there anything I should bring with me to my appointment?

- Any medications that you are currently taking.
- A dressing gown, clothing and toiletries for a two-night admission.
- You may also like to bring a personal stereo (with headphones) to listen to during treatment.

What to do if you can't make your appointment

Please contact the Lithotripsy Unit on 020 8846 1236, or Christopher Booth ward at Hammersmith Hospital on 020 3313 6732.

How do I get to Hammersmith Hospital?

We advise you to travel, if possible, by public transport when visiting our hospitals. Car parking is limited and you may find it difficult to find a place to park near the hospital. There are pick up and drop off zones on site. Detailed directions are on the Hammersmith Hospital website.

The nearest tube stations are:

East Acton – 12 minutes' walk to the hospital or you can get the bus from stop C on Du Cane Road (3min walk). Buses (7, 70, 72, 272, 283 and N7)

White City – 14 minutes' walk or you can get the bus (72 or 272)

Wood Lane – 16 minute walk or you can get the bus from White City station (72 or 272)

Bus routes – 7/ 70/ 72/ 272/ 283/ N7 all stop outside the hospital.

What you need to look out for at home

You should be able to resume all your usual activities the day after your appointment, provided you have had no complications. You may experience some abdominal pain, discomfort and nausea after the procedure. This is normal and should improve within a few days. If you are having continuous severe pain, vomiting, a high temperature or fever please contact your GP or go to your nearest Accident & Emergency (Casualty) Department, as you may have pancreatitis and need to be admitted to hospital.

Will I need further procedures?

You may require a second lithotripsy session to completely fragment the stones. If you need this, you will be given a date for this before you leave hospital. Most patients require a follow-up ERCP to remove the fragments of the shattered stone(s) within a few weeks of lithotripsy. You will be informed of this date via post/telephone.

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any suggestions or comments about your visit, please either speak to a member of staff or contact the patient advice and liaison service (PALS) on 020 3312 7777 (10.00 – 16.00, Monday to Friday). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street
London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: 020 3312 1337 / 1349

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

Department of Gastroenterology

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