Surgery for cancer of the pancreas: distal pancreatectomy

Hepatobiliary Services
Information for Patients

Liver
Pancreas
Gall bladder
Stomach
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The aim of this booklet is to help you understand more about the treatments that are available to you. There is a glossary at the end of the booklet where words that you may be unfamiliar with are explained. Words in bold type can be found in the glossary.

Where is my pancreas, and what does it do?

Your pancreas is situated in the upper abdomen and lies at the back, behind the stomach. It is approximately 6 inches (15cm) long. It has three parts, which are referred to as the head, body and tail.

The pancreas cells make chemicals that are used in digesting food. Normally these chemicals are drained by the pancreatic duct (which acts like a tube) into the duodenum. Here they help the body to digest food, particularly fats.

The pancreas also contains cells known as islets of Langerhans. These cells make two hormones, insulin and glucagon. These hormones go directly into the bloodstream to maintain and control the body’s blood sugar, preventing diabetes.

What is cancer?

The body normally works on the principle that as one cell dies, it is replaced. However, cancer occurs when cells grow and do not die. These cells then form new abnormal cells, which in turn form a tumour. These cells can spread to nearby tissues and other organs.
Cancer of the body and tail of the pancreas

Cancer of the pancreas most commonly occurs in the head of the pancreas. However, tumours may occur in the body or tail of the pancreas. These cancers are less easy to diagnose as they do not usually cause obstructive jaundice.

Symptoms may include:

- Sickness
- weight loss
- diabetes - this can occur with the disease or following surgery
- back pain
- abdominal pain
- indigestion

How is pancreatic cancer diagnosed?

When you see your consultant surgeon in clinic, he will order blood tests and special X-rays to see if anything is wrong with your pancreas. The blood tests may detect abnormal liver function and certain chemicals in the blood may be higher than usual. However, even if levels are normal it does not always mean that a cancer is not present. Your consultant will organise scans of your abdomen, and these could be:

- an ultrasound scan
- a Computed Tomography (C.T.) scan
- a Magnetic Resonance Imaging (M.R.I) scan
- a Magnetic Resonance Cholangio-Pancreatogram (M.R.C.P)

If the cancer has caused obstructive jaundice, an Endoscopic Retrograde Cholangio-Pancreatogram (E.R.C.P.) may be carried out. This is done in the Endoscopy Unit at either Leicester General Hospital or Leicester Royal Infirmary.

Separate leaflets about these tests are available - please ask a member of staff if you would like one.
While planning your care, your doctor will wish to discuss your medical problem at a weekly meeting with other specialists. This means that your planned treatment is a joint decision by your doctor and several other specialists. Members of the MDT include:

- other hepatobiliary surgeons (doctors who specialise in operations involving the liver, pancreas and biliary tree)
- a radiologist (a specialised X-ray doctor)
- a pathologist (a doctor who studies body tissue)
- an oncologist (a specialist cancer doctor)
- doctors and nurses from the **palliative care** team
- medical consultants
- clinical nurse specialists.

### What treatments are available for pancreatic cancer?

Pancreatic cancer may be treated by surgery and / or chemotherapy.

**Surgery**

The only treatment for curing pancreatic cancer is to have surgery to completely remove the cancer and to stop it returning. Only 10% of cancers are diagnosed at a stage where this is possible.

The extent of the spread of the disease will determine what operation your surgeon performs.

The operation to remove the tail and / or body of the pancreas is called a distal pancreatectomy. This procedure may include a splenectomy (removal of the spleen).

Sometimes this surgery can be performed laparoscopically (see below). Your doctor will discuss this with you.

The operation lasts between 4 and 7 hours.
Splenectomy

Your consultant will inform you if you are likely to have your spleen removed during your pancreas operation. The spleen helps in fighting infections within the body. However if you no longer have a spleen, your body will still be able to cope with most infections, but sometimes serious infections can develop more quickly. In order to safeguard against this, you are advised to:

- Inform your G.P. and dentist that your spleen has been removed.
- Wear a medical alert bracelet / necklace or carry a card alerting others in an emergency.
- Ensure that your immunization record is up to date, including routine childhood ones. Your G.P. or practice nurse will be able to assist you.
- Have an influenza vaccination every year.

You will be advised to take antibiotics every day for life, to help prevent the onset of infection.

Prior to your operation you will be advised to be immunised against the following:

- Pneumococcus infection
- Haemophilus Influenzae type B (HIB)
- Meningitis C
- Influenza, if you have not had an injection within the last year.
What is laparoscopic pancreatic surgery?

This is a ‘keyhole’ operation to examine or remove part of your pancreas. It is done under a general anaesthetic and can take several hours, depending on the operation necessary for you.

The operation is performed through small cuts made in your abdomen. One of these will be in the region of your navel. Three, or more, other tiny cuts are made to the upper abdomen. These cuts are called port sites. Carbon dioxide gas is put into your abdomen to give the surgeon a clear view of your pancreas during the operation. Hollow tubes are placed into the cuts and through these your surgeon passes instruments to perform the operation.

What are the benefits of laparoscopic surgery?

If you have laparoscopic surgery, rather than ‘open’ surgery

- you will not need a large cut
- you should experience less pain
- there is less risk of infection
- you will need a shorter hospital stay
- you should have a shorter recovery time
- you should have less wound problems.

Risks of laparoscopic surgery

This is normally considered a safe and effective procedure, however there are some risks to consider, as well as the general surgery risks:

- Conversion from keyhole to open surgery
- Damage to your intestines
- Port site hernia
- Wound infection
Consenting to surgery

Before any operation is performed, your doctor will need to have your consent. This is a written form that you and your doctor will sign together.

Your doctor will tell you how much of your pancreas will need to be removed, and whether or not he is intending to remove your spleen. However you also need to be aware that sometimes it is only during the operation that the spread of the disease is fully apparent. This may mean that the cancer has become fixed to important blood vessels or structures, or that the cancer has spread to other organs.

You need to be fully aware of the operation that you are going to have done. If you have any doubts or questions, you should speak to your doctor.

What are the risks of surgery?

With any operation there are risks. Your anaesthetist will see you prior to surgery, to assess whether you are fit enough to undergo the proposed surgery. Your anaesthetist will review your breathing ability and also any cardiac (heart) history you may have. A routine chest X-ray and a tracing of your heart (E.C.G.) will be done.

The operating time for pancreatic surgery can be several hours, so you will be advised in the time leading up to your operation to concentrate on getting yourself as fit as you can and building yourself up.

If you smoke, try to cut down (giving up altogether is preferable) to reduce the risk of a chest infection developing.

With long operations, there is a risk of clots forming in your legs - deep vein thrombosis (DVT). During your stay in hospital, you will be given a pair of support stockings to wear. Your doctor will also prescribe you regular heparin injections. While on the operating table, you will have a pair of compression boots put on your legs, to aid blood flow.
What are the risks of surgery? (continued)

You will have blood specimens taken before you go to theatre to check your blood group and your blood’s ability to clot. We will also carry out routine liver function tests, blood sugar levels and check that you are not anaemic.

Many of the above tests will be carried out at your pre-assessment appointment before you are admitted for your operation. You will also be screened for **MRSA** at this appointment.

What are the risks of pancreatic surgery?

Although this is complex surgery, most people leave hospital well and pain-free. However, 1 in 20 patients can have severe complications, which can prove fatal.

Other problems which could happen after surgery are:

- Pancreatic duct leakage, which could require further surgery to rectify the problem.
- Bowel leakage.
- Heart problems.
- Chest infections, which could lead to pneumonia.
- Large amounts of blood loss, which may mean that you need a blood transfusion.
- Infections from wounds and drains.

As the pancreas produces insulin for controlling your body’s sugar levels and also enzymes to help with digestion, you have an increased risk of developing either diabetes or requiring medication for help with enzyme replacement.
After your operation, you will be transferred to the ‘high dependency ward’ or ‘intensive care unit’. This is routine following any major surgical operation.

**Tubes and drains**
When you wake up from your operation you may be aware of a tube helping you to breathe.

You will have a tube in your neck. This allows the doctors and nurses looking after you to give you fluids and other medications you might require to help with your recovery, such as antibiotics. A further tube for giving medication may have been put in your arm. You will also have tubes in place to help drain fluid from the wound.

**Urinary catheter**
A fine tube (catheter) will have been placed in your bladder to drain your urine into a bag. The catheter will also help those planning your care to assess how much fluid your body is passing.

**Pain control**
It is very important that your pain is well controlled so that you are not frightened to move and cough to help keep your chest clear. You will probably have an epidural that delivers strong pain killers through a fine tube that goes into your back (as is sometimes used for women giving birth). The nurses will monitor you regularly and ask you if you have pain or if you feel sick or drowsy. A specialist nurse from the pain team will see you every day to check on your progress.

**Mobility**
As you begin to recover after your operation, the drains and tubes will be removed, allowing you to move more freely and helping you to avoid complications that could arise from staying in bed too long.
**How long will I be in hospital?**

When the team looking after your care feels that you are recovering adequately, you will be transferred back to the general surgical ward until you are ready to be discharged home.

You should expect to stay in hospital for approximately two weeks, but this can vary from patient to patient.

During your operation your surgeon will have sent pieces from the removed pancreas for examination in the laboratory. Your consultant will inform you of the results of these when they are available.

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**Going home**

Remember that your recovery is unique to you. Everyone recovers at different rates.

Please be aware of the following when you go home:

**Tiredness:** You will feel tired for some weeks, even several months, following your operation. Have plenty of rest.

**Exercise:** Gentle exercise will help you gain strength and increase your mobility. Gentle sporting activities may be resumed as you feel able, as can sex. However, seek your doctor’s advice before starting strenuous activity for the first time.

**Pain relief:** You will be given pain relief medication to take home with you. If you are in pain, it is important that this medication is taken according to the instructions on the packet. It is much better to keep the pain under control than to try and treat it when it has become unbearable.

**Opening your bowels:** Some pain relief medications can cause constipation, so drink plenty of water and eat fresh fruit and vegetables. If you become constipated, you may find that your bowels begin to work too frequently and your motions become pale, smelly and float. Please let us know if this happens, as you may need enzyme replacement capsules.
**Diet:** There are no restrictions on your diet. However, you will have probably lost weight following surgery. It is important to eat balanced meals. If your appetite is poor, small meals every few hours may help you to gain weight.

**Wound care:** If your wound needs dressing, the ward staff will organise for your local district nurse to do this. Please ensure that the area is kept clean and dry. You may notice some numbness of the skin below the scar line - this is normal and is a result of the nerves being cut during surgery. This numbness will fade in time.

**Pancreatic enzymes:** You may already have been prescribed capsules to help your body to break down the fats in your diet properly.

If you experience any of the following (whether you are taking the capsules or not), please contact us: excessive wind pains; weight loss; opening your bowels more than three times per day; stools that are pale, smelly and difficult to flush away.

**Driving:** You should not drive for several weeks after your operation. You must not drive until you are no longer requiring strong painkillers, and you are able to safely make an emergency stop. You will need to inform your insurance company of your hospital stay.

**Follow-up:** Following your surgery, you will be seen in the outpatient clinic about four to six weeks following your discharge. The appointment may be sooner than this if the results of the tissue taken during your operation are not available before you go home.

**Please contact your GP or Nurse Specialist / Key worker for advice if you experience:**

- a temperature above 38°C
- redness or leakage from your wound
- any increase in pain, or a new pain
- nausea or vomiting
Going home (continued)

- jaundice
- any new or unexplained symptoms.

Chemotherapy

After your operation, your consultant will discuss the need for further treatment with an oncologist, who may prescribe chemotherapy for you. This is the use of anti-cancer drugs to destroy cancer cells. This will be discussed with you before you go home, and an appointment made if appropriate.

Other sources of help and information

Cancer Information Centre
Osborne Building
Leicester Royal Infirmary, LE1 5WW

Staff will provide you with the information you need, or signpost you to help and support available locally and nationally. Internet facilities and assistance are available.

Opening hours: Monday to Friday from 9.30 am to 4.30 pm
Telephone: 0116 258 6189
Email: cancerinfo@uhl-tr.nhs.uk
Website: www.leicestershospitals.nhs.uk/cancerinfo

Coping with Cancer
35 Westleigh Road
Leicester, LE3 0HH

Provides practical and emotional support to those affected by cancer. Services include complementary therapies and counselling.

Telephone: 0116 223 0055
Website: www.c-w-c.org.uk
Other sources of help and information (continued)

Macmillan Cancer Support
For information and support from cancer support specialists.
Freephone: 0808 808 00 00
Website: www.macmillan.org.uk

Cancer Research UK
Ask specialist nurses about anything to do with cancer.
Freephone: 0808 800 40 40
Website: www.cancerresearchuk.org

Pancreatic Cancer UK
A central resources of information on pancreatic cancer for patients and carers.
Website: www.pancreaticcancer.org.uk

Glossary

**Endoscopic:** insertion of a small illuminated tube down the gullet in order to investigate or treat disorders.

**Jaundice:** yellowing of the skin and whites of the eyes. Usually means there is something wrong with the livers, pancreas or gall bladder, causing a blockage.

**MRSA:** *(Methicillin Resistant Staphylococcus Aureus):* A type of bacteria that is resistant to some antibiotics.

**Palliative care:** care given to control symptoms such as sickness and pain.
Contact details

Hepatobiliary Specialist Nurses (Key Workers)
Cris Pollard 07908 450785
Sophie Noble 07908 464558
Jo Bishop 07506 709014
Office hours: Monday to Friday 8:00 am - 4:00 pm

Questions

If you have any questions, write them down here to remind you what to ask when you speak to your consultant.

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If you would like this information in another language or format, please contact the service equality manager on 0116 250 2959