

Whipples Operation (Pylorus preserving pancreatico-duodenectomy)

Information for patients



Leeds Cancer
Centre

This leaflet aims to help you and your family understand more about your Whipples operation.

It will be given to you in addition to the information you receive from your surgeon and other members of their team.

We realise this may be an anxious time for you and your relatives. We hope that by providing accurate information you will know what to expect before and after your operation and feel better prepared

This booklet will explain:

- What the pancreas does
- Why you need an operation
- What the operation involves
- Preparing for and recovering from the operation
- The potential risks of the operation
- Preparing to go home

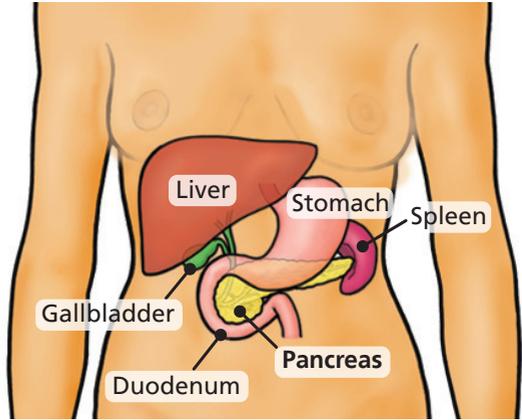
St James's University Hospital is a specialist regional centre for surgery on the pancreas.

You will be cared for by a healthcare team who are experienced in treating people having this type of operation.

The Pancreas

The pancreas is part of the digestive system. It lies at the back of the upper abdomen in front of the spine and behind the stomach.

It is about 20cm (8 inches) long and it has four sections: the head, neck, body and tail.



The pancreas produces:

- Pancreatic juice (enzymes) to help digest your food
- Insulin to control blood sugar levels.

Pancreatico-duodenectomy

This is known as Whipple's or Pylorus Preserving Pancreatico-Duodenectomy (PPPD).

Reasons for this surgery

This is a complex and major operation to remove the head of the pancreas gland and surrounding organs.

The procedure is carried out for patients who:

- Have a suspicious mass or tumour in the head of the pancreas, bile duct or duodenum (part of the small bowel) which may be a cancer.
- Have a definite cancer in the head of pancreas, bile duct or duodenum.

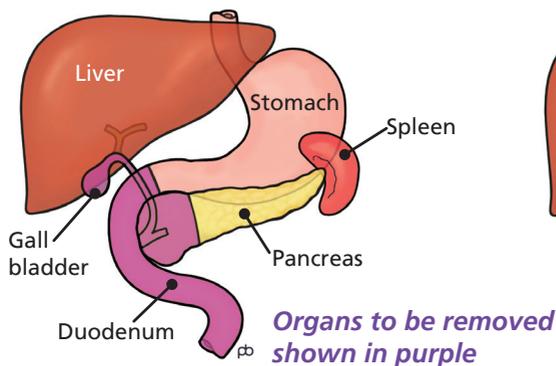
- Have a mass or tumour which may possibly become a cancer in the future.
- Have a benign inflammatory condition.

What the surgery involves

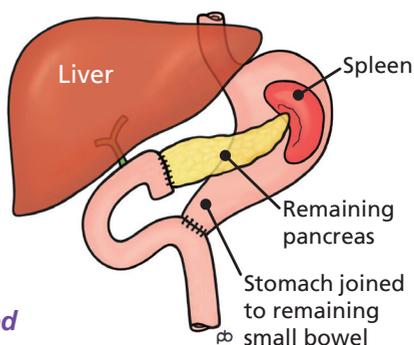
The surgeon removes the head of the pancreas, a part of the duodenum, some of the bile duct and the gall bladder. Your surgeon will then re-join the stomach, bile duct and remainder of the pancreas to the small bowel. This will help your gut work normally. The operation usually takes 4-6 hours.

Pancreatic Head Resection

Before surgery



After surgery



The aim of the operation is to remove the mass or cancer but keep some of the pancreas so you can digest food normally after the operation.

It is important to remember that very occasionally, at the time of your operation, surgery may be more difficult than previously thought. If this is the case your consultant may need to carry out more extensive surgery or may not be able to perform the operation.

On some occasions your disease may have progressed and the surgeon may opt to perform 'bypass surgery'. The type of surgery performed will be discussed with you after your surgery.

Preparing for your Operation

Before your operation it is important that you stay as fit and well as you can. Taking regular exercise and eating nutritious food is very important. If this is difficult for you please ask for advice from your doctor or specialist nurse.

If you smoke you should try to stop as soon as you can. Stopping smoking, even just a few weeks before your operation, will make a big difference to your recovery and reduce your risk of developing complications.

Pre-assessment

To prepare for your surgery you will need some routine tests to make sure you are well enough for your operation. These tests are usually done in the pre assessment clinic a few weeks before your operation.



You will receive an appointment to attend this clinic or you may attend the clinic straight after your outpatient appointment.

You will be involved in planning your care and recovery from the time you are seen in the pre-assessment clinic. This is a good time for you to tell us about your individual needs and circumstances.

You will be asked about your general health, past operations, illnesses, allergies and medications you take. You may also have an ECG and blood tests.

This is a good time to start thinking about what support you may need when you go home after your operation. This is especially important if you live on your own. It is advisable to bring a friend or relative to this appointment who can be involved and support you with planning your care and recovery. If you are worried about managing at home after your surgery, let us know as soon as possible. Please let us know if any of your circumstances change whilst you are in hospital.

The nurses in pre-assessment will advise you about the trust's infection prevention policy.

Coming into hospital

A letter will be sent to you with the proposed date of surgery. This will also outline the admissions procedure on the proposed day of your surgery. You will need to stop eating and drinking several hours before your operation. You will be admitted to hospital on the day of your operation. A nurse and a doctor will talk to you and answer any queries you or your family may have. You will be asked to wear elasticated stockings (anti-embolism) as they help to prevent deep vein thrombosis (blood clots) forming during the time you are less mobile. You will also be given a small daily injection to help thin your blood, after the operation, for a total of 28 days.

Medication

Most medicines should be continued before your operation and throughout your hospital stay.

Please bring your regular medication with you. However some medication will need to be stopped before your surgery, or a few days before your surgery to reduce any risks. This will depend on the medications you have been prescribed. The doctor or anaesthetist will advise you which medication to stop and when to stop taking them.

If you have a heart problem, you must take your blood pressure medication, beta-blocker. If you taken any blood thinning medication e.g. aspirin, clopidogrel, warfarin you must tell pre-assessment and the surgical team you are taking this medication as they will need to be stopped before your operation.

Consent

A consent form is a document which we will ask you to sign to say that you agree to have the surgery. Your doctor will explain the details of your surgery to you and the risks and benefits associated with it. Please do not be afraid to ask questions as it is important for you to fully understand the operation.

If you have questions about your surgery it can be useful to write these down to help you to remember when you see the doctor.

Recovering from the operation

After your surgery you will be admitted to the High Dependency Unit (HDU). This is usually for 1-3 days after your surgery for close monitoring.

While you are there your family will be able to visit.



You will be awake and able to talk when you go to HDU but you may feel sleepy. You will be attached to various tubes and monitors, which the nurses will explain to you.

These may include the following:

Intravenous Fluids (Drip) - these are given through a tube inserted into a vein in your neck and/or arm to make sure you are getting the correct amount of fluid. Certain medications may be given through this tube. Your consultant will decide when it is safe for you to begin to drink.

Naso-gastric (NG) tube - this is a thin tube that goes up your nose and down to your stomach. This will drain away any stomach contents to avoid sickness. This will be inserted whilst you're asleep in surgery. This tube will be attached to a bag to allow it to drain freely and will usually be removed within the first few days after your surgery.

Oxygen therapy - you will need oxygen for a number of days following surgery. Nursing and physiotherapy staff will advise you on some deep breathing exercises which will help to prevent you developing a chest infection. Deep breathing exercises are very important and will aid a speedier discharge home.

A surgical drain - this is a thin plastic tube that may be inserted into your abdomen during your operation. It drains fluid away from the area of your operation and is usually removed 3-4 days after surgery. The removal of this drain will be guided by the samples the ward nurses take from the drain.

Catheter - during your operation a catheter will be inserted into your bladder. This is a tube which drains your urine into a bag, so we can monitor your urine output to make sure you are well hydrated and your kidneys are working properly. The catheter will stay in place until the surgical team advise to have it removed. Once you are well enough you will be able to return to the Ward.

Pain control

Your anaesthetist will speak to you before the operation about controlling your pain.

Wound catheter - a small ball-like infusion device that delivers continuous pain medications directly into your stomach muscles and provides analgesia around the surgical wound area. This will be placed during your operation.

Epidural - The anaesthetist will decide if an epidural is of use. A tube is inserted through the skin in the centre of your back. A local anaesthetic is given through this which will numb the nerves around your abdomen and wound. The epidural tube will be held in place by strong tape so it does not fall out and will usually stay in place for around five days.

PCAS (patient controlled analgesia system) - The most common form of painkiller used is a patient controlled analgesia pump.

You will be given a handset with a button which, when pressed, will give you a controlled dose of pain relief through a line in your arm. There is a security device which prevents you taking too much.

Oral medication - once the PCAS, wound catheter or epidural is removed you will be given regular painkilling tablets. Our aim is for you to be as pain free as possible. If you experience pain please inform your nurse.

Wounds

Your wound will be checked regularly by the nurse for signs of healing and infection. A dressing will be applied where necessary. Your stitches or staples are likely to be removed around 10-14 days after your operation either in hospital or at home by either the district or practice nurse. Sometimes we use dissolvable stitches that do not require removal and will dissolve over time.

Personal care

After your operation you may need help with your personal care. If you have any special needs or concerns discuss this with the nurse caring for you.

Eating and drinking

You will be allowed to start eating and drinking a few days after your operation. You will firstly be allowed sips of water which will gradually be increased until you can drink freely. After this you will be given a light diet and encouraged to eat. The dietitian will see you whilst you are on the ward.

Once you begin to regain your appetite and strength we welcome your family to bring in food from home.

Please be mindful that we do not have facilities to re-heat food. We do however have a patient fridge and we can label your food and store it for you for when you are ready to eat.

Potential risks and long term effects of surgery

As with all major surgery there some complications involved during and after the operation. Unfortunately 2 in 3 patients undergoing this type of surgery will have a complication.

Deep Vein Thrombosis/Pulmonary embolism

Patients having operations on their abdomen are at risk of developing blood clots in their legs and lung while they are in bed recovering. These are potential serious complications. You will wear compression stockings, be encouraged to mobilise and have blood thinning injections to prevent this. The blood thinning injection will continue until 28 days after your surgery date.

Bleeding

Some bleeding is expected during your operation and occasionally a blood transfusion is needed. Bleeding can happen after surgery but this is rare.

If the bleeding continues after your operation, it may be necessary for you to return to theatre.

Ileus

This is not uncommon following surgery and your bowel can go to sleep for a few days. Preventative measures are in place for this type of surgery for example, a nasogastric tube. However, sometimes the ileus may persist and you may experience nausea or being sick.

Digestive juice leak

Leaks can occur from where the pancreas is divided. Sometimes you may be discharged with a drain in place until this leak stops. Rarely you may need the radiology doctors to put new drains in.

Wound infection

Wound infections can be superficial (on the surface) or deep into the abdomen. The level of the wound infection will determine the treatment you may need. Sometimes we may have to open the wound to allow the pus to drain. In some cases a short course of antibiotics will suffice.

Long term effects

Diabetes

When part of the pancreas is removed the remaining pancreas may not be able to produce enough insulin to control your blood sugar levels. Most patients that undergo this operation do not experience this problem. However, if this problem does occur you will be given treatment, advice and support on how to manage this before you are discharged home.

Symptoms to look out for of this occurring is excessive urine and increased thirst. You should also speak to your GP about monitoring for diabetes after your surgery.

Pancreatic insufficiency

In some patients there is not enough pancreas remaining to produce the enzymes needed to digest your food. You will be given enzymes, to take with your food. The doctors and nurses will explain how to take these.

Your consultant or dietitian may start these before your operation and a dietitian may see you during your hospital stay. You will remain on these supplements for life.

Change in Bowel Habit

This operation may cause a change in your bowels habits. You may need to change your diet and eat smaller meals more often. The dietetic team can help support you with this.

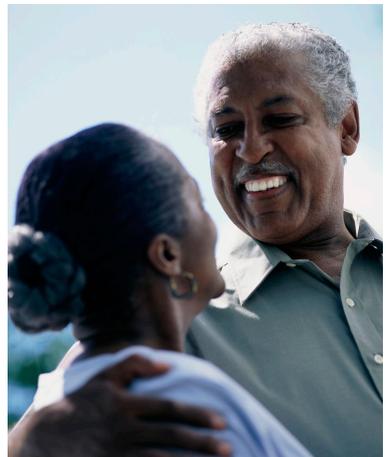
The risks and benefits of the operation

There is a very small risk of dying from this operation. Around 3 in every 100 patients will die as a result of having this operation. This means that 97 out of every 100 people do not die.

Going home

When you go home you will have to inject yourself with blood thinning injections up until 28 days after your operation. These will be the same injections you have received in hospital to help prevent blood clots. If you are unable to inject yourself, after the nursing staff have taught you, please let the nursing staff know and we can make alternative arrangements.

It is important that you and your family, together with the nursing staff make plans for home as early as possible. This helps to make sure you do not stay in hospital longer than necessary.



You and your family may have concerns about how you will manage and what to do if any problems arise. Please discuss any concerns you have with your doctors and nurses who will offer you help and advice. It is hoped that the following information will inform you of what you can expect when you go home.

Tiredness

Recovery from this operation is slow and may be 3-6 months before you feel back to your normal self. During this time you will gradually become stronger.

It is important that you take plenty of rest during these early days and weeks at home. Increasing your level of activity as the weeks go by is important. Taking a short walk each day, increasing the distance gradually will have positive benefits.

Bowels

Normally it takes a few weeks for your bowels to settle down into a regular pattern. Occasionally your painkillers may make you constipated. Please contact your GP or nurse specialist if you are concerned about this.

Eating

By the time you are ready for home you will be eating and drinking again. Your appetite is likely to be greatly reduced and you may feel full very quickly. You will be advised to eat small meals and snacks often throughout the day rather than three large meals.



It is likely if you eat too much you may feel abdominal discomfort and bloating. You will soon learn how much food you can eat at any one time and you can adjust to smaller meals but more often during the day. Your doctor may have prescribed you some pancreatic replacement enzymes to help absorb your food. Your dietitian and nurse specialist will give you advice on how to take this.

Pain

Your wound may feel tender for a period of time after going home. Please make sure you take your painkillers as needed to keep you comfortable and allow you to move around freely.

Returning to normal

You may want to know when you can go back to work, start driving or go on holiday. Although we know that recovery from this surgery takes several months, the rate of recovery is different from person to person and it is difficult to predict how long this will take in your case.

Follow up

Following your operation you will return regularly for follow-up appointments at the hospital. Your first clinic appointment will be about four weeks after going home. At this appointment you will be told the pathology results from your surgery and if you require any further treatments.

Contact numbers

Liver & Pancreas Nurse Specialist	0113 206 8601
Mr Smith's secretary	0113 206 4890
Mr Pine's secretary	0113 206 5122
Mr Young's secretary	0113 206 5122
Ward J82	0113 206 9182
High Dependency Unit Ward J81	0113 206 9181

Leeds Cancer Support and the Sir Robert Ogden Macmillan Centre

We offer a variety of support services including complementary and supportive therapies in a welcoming environment to patients, families and friends. Please come and browse or just drop in for a chat. We are located in Bexley Wing and at the Sir Robert Ogden Mcmillan Centre on St James's Hospital site.

Information Centre, Outpatients Unit, Level 1, Bexley Wing

Open from 10am - 4pm Tel: **0113 206 8816**

The Sir Robert Ogden Macmillan Centre

Open 10am - 4pm Monday to Friday Tel: **0113 206 6499**

Email: leedsth-tr.Cancersupport@nhs.net

Maggie's Centre

Maggie's is a warm, welcoming place where you can meet people who are experiencing similar things to you. You may also be able to find support groups specific to your needs and get advice and information from their professional staff. You don't need an appointment and all support is free.

Maggies is situated on the St James's Hospital site, next to the multi storey car park. Open Monday to Friday 9.00 am - 5.00pm. Tel: **(0113) 457 8364**

Email: leeds@maggiescentres.org **Website:** maggiescentres.org

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Your views matter

The printing of this leaflet has been
funded by Leeds Hospitals Charity
leedshospitalscharity.org.uk

leeds hospitals charity

charity number: 1170369

© The Leeds Teaching Hospitals NHS Trust • 4th edition (Ver 1)
Developed by: Anna Crowther, Leeds Pancreas Advanced Nurse Practitioner
Produced by: Medical Illustration Services • MID code: 20240104_002/MH

LN003925
Publication date
02/2024
Review date
02/2027