The ROYAL MARSDEN
NHS Foundation Trust

Having pancreatic surgery

GI Unit

Patient Information

NHS

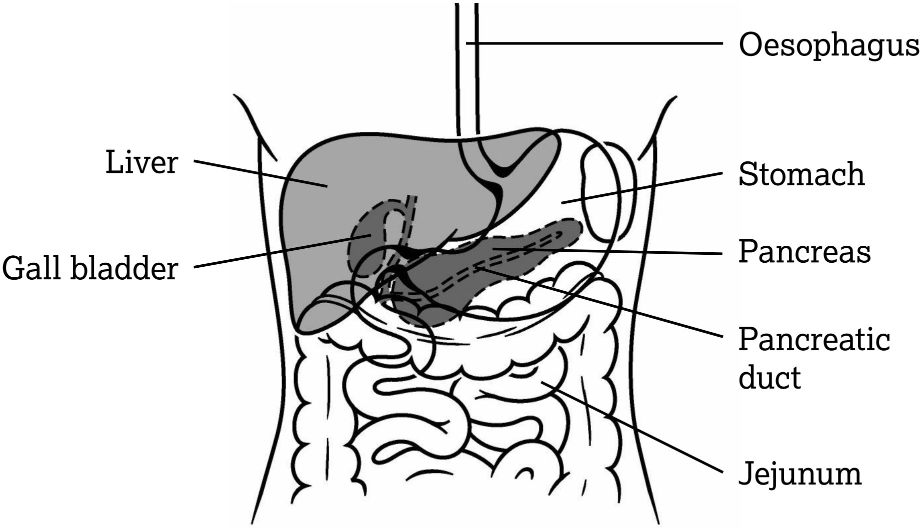
Introduction

Your doctor has recommended that you have an operation to remove the tumour from your pancreas. This booklet explains your operation and answers some common questions that you may have.

What operation will I have?

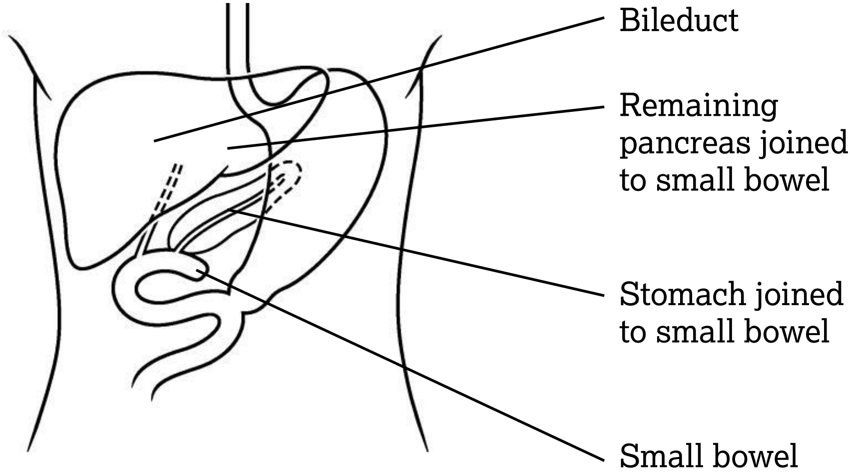
The operation you have will depend on which part of the pancreas is affected by tumour and needs to be removed:

Before surgery



Pylorus preserving pancreato-duodenectomy (PPPD)

After surgery



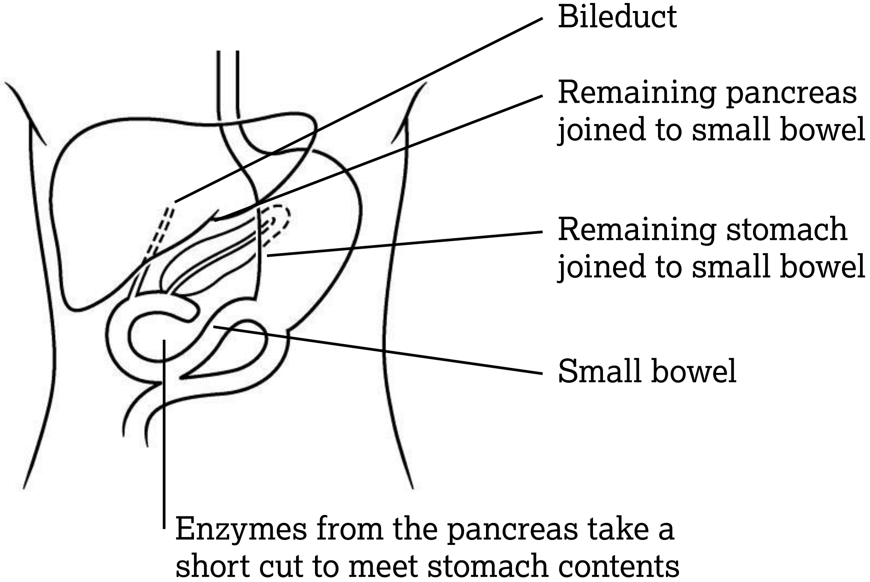
In this operation, the following are removed:

- the head of the pancreas
- part of the small bowel (duodenum)
- the gallbladder and part of the bileduct.

The surgeon will rejoin the stomach, bile duct and pancreatic duct to the small bowel. These joins are called anastomoses.

Whipple's operation

After surgery



In this operation, the following are removed:

- the head of the pancreas
- part of the small bowel (duodenum)
- the gallbladder and part of the bileduct
- part of the stomach.

The surgeon will rejoin the stomach, bile duct and pancreatic duct to the small bowel.

A **distal pancreatectomy** is an operation to remove the tail and part of the body of the pancreas. The spleen may also be removed in this operation.

Occasionally, it is necessary to remove the whole of the pancreas (**total pancreatectomy**). Sometimes at the time of surgery, the surgeon will not be able to remove the tumour.

This is because it is not always possible to know beforehand whether the tumour is benign (non-cancerous) or cancerous. The surgeon will then take a biopsy to confirm the diagnosis.

If the tumour cannot be removed, the surgeon may try and ‘bypass’ it. The surgeon takes a loop of small bowel, below the tumour, makes a couple of holes in it and attaches the stomach and bile duct, so that food and bile can bypass the tumour through the GI tract. This procedure is called a **choledocho-gastrojejenostomy**.

Any tumour and surrounding tissue removed at the time of the operation will be sent off for analysis. It will be looked at under a microscope to confirm the diagnosis and check that the tumour has been completely removed. It usually takes three to four weeks for the results to come back.

Your surgeon will explain these options to you. Please ask questions if there is anything you do not understand.

What are the risks and complications of surgery?

Any surgical operation on the pancreas is a major procedure. Complications can happen which will slow down recovery and if they become serious, can carry a small risk of death.

As with any major surgery, there are also risks relating to having a general anaesthetic. You will meet an anaesthetist before your operation to discuss your general health and your surgeon will discuss any other possible risks with you. You may find the booklet *Your operation and anaesthetic* helpful (available via The Royal Marsden online Patient Information library).

The most common complications include:

Bleeding (haemorrhage)

You may lose some blood during the operation. Sometimes, bleeding can happen in the days after surgery. We will watch you closely and where necessary, give you a blood transfusion.

Infection

There is an increased risk of developing an infection after the operation. This can affect your chest, urinary tract or your wound. If you do develop an infection, we will treat it quickly, often by giving you antibiotics.

Leakage at anastomosis (join)

When the surgeon re-joins your bowel to your stomach, pancreas and bile duct we need to give these joins time to heal. Immediately after the operation, food and drink needs to be kept away from these joins. You may have two stents (small tubes) which help drain fluid from the pancreas and bile duct after your surgery.

Blood clot (thrombosis)

The risk of developing a deep vein thrombosis (a blood clot in the leg) or a pulmonary embolism (a blood clot in the lung) increases after any surgery. To help prevent this happening, we will provide special stockings for you to wear while you are in hospital. We will also give you a small daily injection of an anticoagulant, which reduces the body's ability to form a DVT.

Possible long-term risks include:

A lack of pancreatic enzymes

You may need to take tablets when you eat to replace the pancreatic enzymes, as you may not be producing enough following your surgery. In order to know whether you need these tablets, you will have had to return to a normal diet. Your doctors may recommend replacement pancreatic enzyme tablets at your first follow up appointment. A lack of these enzymes results in your bowel motions being very pale in colour, floating and making it difficult to flush away. If you have these problems, please let your doctor or specialist nurse know.

Diabetes

Part of the pancreas produces insulin that helps control blood sugar levels. Some people develop diabetes before the operation, while other people may become diabetic and require dietary advice, tablets or insulin injections afterwards. You will usually know if you have diabetes or if you are going to need insulin before you leave hospital.

If your spleen has been removed, there is a greater risk of infection and you will need to have a vaccine once a year and take antibiotics for the rest of your life.

What happens before my operation?

You will attend a pre-op assessment clinic to check that you are fit enough to have a general anaesthetic and operation. This may include further tests such as heart and lung tests, and you are likely to be at the hospital for most of the day. If you are going to have your spleen removed, you may need some extra preparation. For example, you may be given vaccinations against certain bacteria.

You will meet members of the team looking after you including an anaesthetist, clinical nurse specialist and dietitian. You will see a physiotherapist either here or when you are admitted to the ward. The physiotherapist will talk to you about your general health and level of activity, and will assess your breathing and mobility. You will also be offered a visit to the Critical Care Unit (CCU) and ward.

What happens immediately after the operation?

You will be taken to the CCU where nursing staff will watch you closely for several days and try to make you as comfortable as possible.

During your stay on the CCU, only two visitors are allowed at any one time. This is to allow both you and other patients time to recover from surgery. Visiting times for the CCU are not restricted but it is very busy between 8am – 10.30am.

You may prefer not to have visitors until after this time. Flowers are not allowed on the unit because of the risk of infection but they can be kept on the ward for you to enjoy when you return there.

Good pain relief after surgery is important. It prevents discomfort and it helps you recover more quickly. Normally before the operation, an anaesthetist will discuss with you the different ways your pain can be controlled. More information on pain relief after surgery is available in the booklet *Your operation and anaesthetic*.

When you wake up after the operation you may be aware of several tubes coming out of your body. Some of them may provide fluid or nutrition and medication. Some of the tubes may be attached to monitors. Other tubes will drain away fluids. These help the staff check your progress. Some of the monitors and pumps may alarm at regular intervals; this does not necessarily mean something is wrong.

You may notice the following tubes:

Intravenous cannulae

These allow fluids and medication to be given directly into a vein. Usually one is inserted into the side of your neck and also into your arm.

Nasogastric tube

This tube passes through the nose into the stomach. It is used to drain away secretions from the stomach. It can also help prevent nausea and vomiting.

Nasojejunal (NJ) tube

A thin tube inserted through your nose into a part of your small bowel (jejunum). You can be fed through this until you are able to eat and drink orally.

Urinary catheter

During and immediately after the operation, it can be difficult to pass urine whilst lying in bed. This tube goes into your bladder and automatically drains the urine into a bag.

Abdominal drain

Normally there are two of these (one on each side of the abdomen). They drain away any blood or fluid that collects around the operation site.

Biliary and pancreatic stents

You may have two stents. These are very thin plastic tubes that pass through the skin of the abdomen to protect the joins that the surgeon makes during your operation. They often drain either a greenish fluid (bile) or a lightish fluid (pancreatic juice).

All these catheters and tubes are easily removed and most of them will be taken out before you go home. Sometimes the nasojejunal (NJ) tube remains in place until you return to outpatients a few weeks later.

You will be seen every day by the anaesthetist and surgeon during your stay on CCU. The pain control team will visit you regularly to make sure your pain is under control.

Physiotherapy

Physiotherapy is an important part of your recovery and helps to reduce the risk of some complications. You will gradually begin to increase your level of activity each day with the help of the physiotherapist and nursing staff. You will also be shown exercises that will help you regain muscle strength and joint mobility.

The physiotherapist will advise you with your breathing, your position in bed or a chair and moving your arms and legs. This will help prevent you becoming stiff and weak, and keep your circulation moving to prevent blood clots forming. When you first get out of bed after your operation, the physiotherapist will help you and check how you are coping with the exercises.

Once your doctors are happy with your progress, you will return to the ward.

Contact details

Your Consultant

Name ....

Tel ....

Registrar

Tel 020 7352 8171 Ext 1783

Senior House Officer (SHO)

Tel 020 7352 8171 Ext 1505

Your Clinical Nurse Specialist (Key Worker)

Name ....

Tel ....

Physiotherapist

Name ....
Tel 020 7808 2821

Dietitian

Name ....
Tel 020 7352 8171 Ext 1653

Alternatively, please contact:

The Royal Marsden Macmillan Hotline: 020 8915 6899

You can ring the hotline 24 hours a day, 7 days a week.

Call us straight away if you are feeling unwell or are worried about the side effects of cancer treatments.

This service provides specialist advice and support to all Royal Marsden patients, as well as to their carers, and both hospital and community-based doctors and nurses caring for Royal Marsden patients.

For further information and support on living with cancer, please talk to your specialist nurse or contact Macmillan Cancer Support via *www.macmillan.org.uk*

Notes and questions

Notes and questions

References

This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

The Royal Marsden Help Centre

Telephone:	Chelsea	020 7811 8438 / 020 7808 2083
	Sutton	020 8661 3759 / 3951
Email:	patientcentre@rmh.nhs.uk	

No conflicts of interest were declared in the production of this booklet.

Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

The patient information service is generously supported by The Royal Marsden Cancer Charity.

royalmarsden.org

Registered Charity No.1095197

Revised January 2025. Planned review January 2028
GI-0853-05

Radiotherapy and
Chemotherapy Services
F538021 & F538022