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UG25 Distal Pancreatectomy for Pancreatic Cancer

Expires end of July 2018

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ROYAL AUSTRALASIAN COLLEGE OF SURGEONS

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What is pancreatic cancer?

Pancreatic cancer is a malignant growth in your pancreas which often causes weight loss, jaundice (your eyes and skin turning yellow), itching and pain. About 2,500 people develop pancreatic cancer every year in Australia.

What is a distal pancreatectomy?

A distal pancreatectomy involves removing part of your pancreas and other nearby structures such as your spleen (see figure 1). Your tests have shown that a distal pancreatectomy offers the best chance of you being free of pancreatic cancer. Chemotherapy before or after surgery may also be recommended to increase the chance of you being free of pancreatic cancer. This has side effects and complications too.

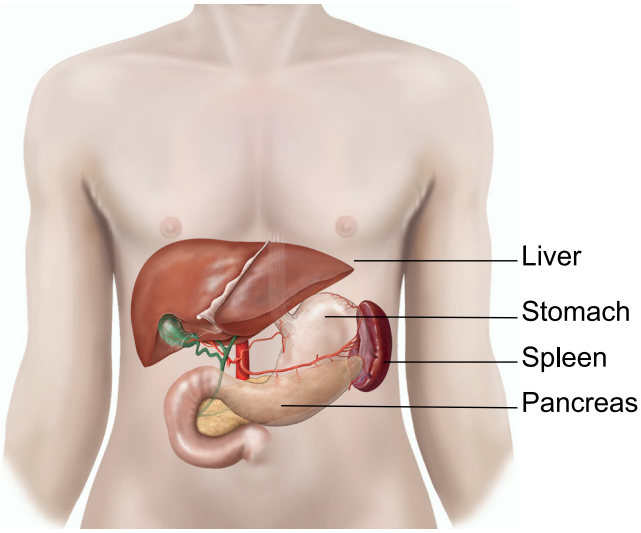

Figure 1
The position of the pancreas

A distal pancreatectomy is a major operation with significant risks involved. It is your decision to go ahead with the operation or not. This document will give you information about the benefits and risks to help you to make an informed decision.

If you have any questions that this document does not answer, ask your surgeon or the healthcare team.

What are the benefits of surgery?

The aim is to remove all the cancer. Even if all the cancer cannot be removed, you should still live longer and have a better quality of life.

Are there any alternatives to surgery?

Chemotherapy has less serious complications than surgery but will not cure you. Your surgeon and oncologist (doctor who specialises in treating cancer with medication and radiotherapy) will be able to discuss this option with you.

What will happen if I decide not to have the operation?

The healthcare team will arrange for you to have chemotherapy or other non-surgical treatment and will continue to be involved in your care.

What does the operation involve?

The healthcare team will carry out a number of checks to make sure you have the operation you came in for. You can help by confirming to your surgeon and the healthcare team your name and the operation you are having.

The operation is performed under a general anaesthetic and usually takes two to three hours. You may be given antibiotics during the operation to reduce the risk of infection.

Your surgeon will divide your pancreas, remove the distal part (tail) and seal the pancreatic duct. They will remove surrounding lymph nodes (glands). They may also need to remove part of your stomach if it is attached to your pancreas.

Your surgeon will usually need to remove your spleen to make sure they remove all of the cancer. The blood vessels that supply your spleen often run through the tail of the pancreas (see figure 2).

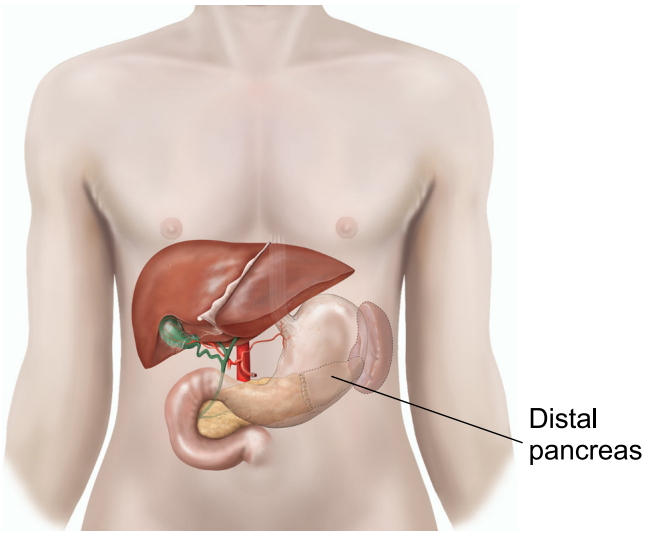

Figure 2
Distal pancreatectomy

The healthcare team will place a small tube in a vein in your arm (drip) and in your neck (central line). They will also place a catheter (tube) in your bladder to help you to pass urine. They may also place a tube (nasogastric or NG tube) into your nostrils and down into your stomach. This tube keeps your stomach empty to help your stomach and intestines to heal.

All organs and tissues removed will be examined carefully for evidence of cancer and will be stored. They may be used in the future to help find new treatments for cancer. Let your surgeon know if you do not want your organs and tissues used in this way.

Open surgery

Your surgeon will usually use open surgery, where the operation is performed through a single cut across the upper part of your abdomen, just under your ribcage.

Your surgeon will close the cut. They may insert drains (tubes) in your abdomen to drain away fluid that can sometimes collect.

Laparoscopic (keyhole) surgery

Your surgeon may use keyhole surgery as this is associated with less pain, less scarring and a faster return to normal activities.

Your surgeon will make a small cut on or near your umbilicus (belly button) so they can insert an instrument in your abdominal cavity to inflate it with gas (carbon dioxide). They will make several small cuts on your abdomen so they can insert tubes (ports) into your abdomen. Your surgeon will insert surgical instruments through the ports along with a telescope so they can see inside your abdomen and perform the operation (see figure 3).

Your surgeon will remove the instruments and close the cuts.

For about 1 in 10 people it will not be possible to complete the operation using keyhole surgery. The operation will be changed (converted) to open surgery.

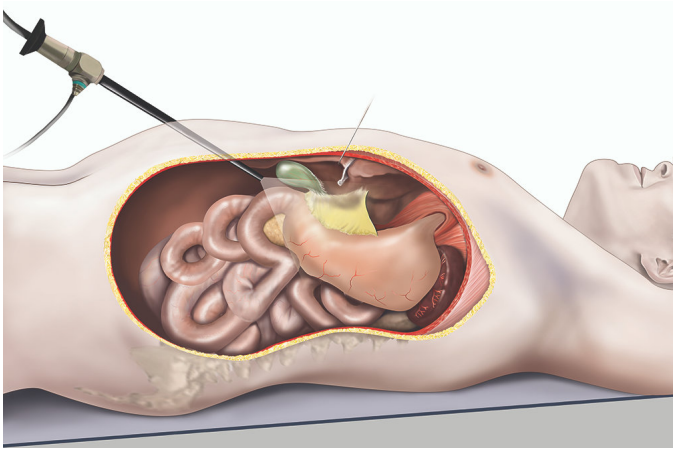

Figure 3
Laparoscopic surgery

Should I have chemotherapy as well?

If you may benefit from chemotherapy before or after surgery, your oncologist will discuss the treatment with you.

What should I do about my medication?

Let your doctor know about all the medication you take and follow their advice. This includes all blood-thinning medication as well as herbal and complementary remedies, dietary supplements, and medication you can buy over the counter.

What can I do to help make the operation a success?

If you smoke, stopping smoking several weeks or more before the operation may reduce your risk of developing complications and will improve your long-term health.

Regular exercise should help to prepare you for the operation, help you to recover and improve your long-term health. Before you start exercising, ask the healthcare team or your GP for advice.

You can reduce your risk of infection in a surgical wound.

- In the week before the operation, do not shave or wax the area where a cut is likely to be made.
- Try to have a bath or shower either the day before or on the day of the operation.
- Keep warm around the time of the operation. Let the healthcare team know if you feel cold.

What complications can happen?

The healthcare team will try to make the operation as safe as possible. A team of doctors and nurses, who perform this operation regularly, will look after you. However, complications can happen. Some of these can be serious. You should ask your doctor if there is anything you do not understand. Any numbers which relate to risk are from studies of people who have had this operation. Your doctor may be able to tell you if the risk of a complication is higher or lower for you.

Complications of anaesthesia

Your anaesthetist will be able to discuss with you the possible complications of having an anaesthetic.

General complications of any operation

- Pain can be severe with this operation. The healthcare team will give you strong painkillers either by an epidural or through the drip. It is important that you take the medication as you are told so you can move about and cough freely.
- Bleeding during or after the operation. This often needs a blood transfusion. You may need another operation to stop the bleeding.
- Infection of the surgical site (wound). It is usually safe to shower after two days but you should check with the healthcare team. Let the healthcare team know if you get a high temperature, notice pus in your wound, or if your wound becomes red, sore or painful. An infection usually settles with antibiotics but you may need another operation.
- Unsightly scarring of your skin.
- Developing a hernia in the scar, if you have open surgery, caused by the deep muscle layers failing to heal. This appears as a bulge or rupture called an incisional hernia. If this causes problems, you may need another operation.
- Blood clot in your leg (deep-vein thrombosis – DVT). This can cause pain, swelling or redness in your leg, or the veins near the surface of your leg to appear larger than normal. The healthcare team will assess your risk. They will encourage you to get out of bed soon after the operation and may give you injections, medication, or special stockings to wear. Let the healthcare team know straightaway if you think you might have a DVT.
- Blood clot in your lung (pulmonary embolus), if a blood clot moves through your bloodstream to your lungs. Let the healthcare team know straightaway if you become short of breath, feel pain in your chest or upper back, or if you cough up blood. If you are at home, call an ambulance or go immediately to your nearest Emergency department.

Specific complications of this operation

Keyhole surgery complications

- Surgical emphysema (crackling sensation in your skin caused by trapped carbon dioxide gas), which settles quickly and is not serious.
- Damage to structures such as your bowel, bladder or blood vessels when inserting instruments into your abdomen (risk: less than 3 in 1,000). The risk is higher if you have had previous surgery to your abdomen. If an injury does happen, you may need open surgery. About 1 in 3 of these injuries is not obvious until after the operation.
- Developing a hernia near one of the cuts used to insert the ports (risk: 1 in 100). Your surgeon will try to reduce this risk by using small ports (less than a centimetre in diameter) where possible or, if they need to use larger ports, using deeper stitching to close the cuts.

Distal pancreatectomy complications

- Pancreatic leak. This is a serious complication that may happen if the seal in the pancreatic duct breaks down (risk: 3 in 10). Pancreatic juices leak into your abdomen, leading to pain and serious illness. This usually settles within a few days but you may need another operation.
- Continued bowel paralysis (ileus), where your bowel stops working for more than a few days, causing you to become bloated and to be sick. You may need an NG tube until your bowel starts to work again.
- Developing an abscess caused by blood or fluid collecting at the site of the operation. You will need treatment with antibiotics and the abscess will usually need to be drained using a needle.
- Failure to remove the cancer. Sometimes the cancer is too far advanced for your surgeon to remove it safely. Your surgeon will usually perform a bypass procedure so you can eat and drink normally and to relieve symptoms of jaundice.

- Damage to your stomach or bowel. This can cause an abnormal connection (fistula) to develop between your stomach or bowel and your skin, or fluid to leak into your abdominal cavity causing peritonitis (inflammation of the lining of your abdomen).
- Rise in platelet count, if your spleen is removed. There is a higher risk of a blood clot in your legs or lungs. You will be given medication to reduce this risk.
- Death sometimes happens with a distal pancreatectomy (risk: less than 2 in 100). The risk is less the fitter you are.

Long-term problems

- Diabetes, because removing part of your pancreas removes some of the cells that make insulin (a hormone that works to move sugar from your blood into your cells to give you energy). You may need to take medication to control this (risk: 1 in 10).
- Weight loss and malnutrition, because fewer enzymes that help you to digest food will be produced. You may need to take enzyme supplements to help you to absorb nutrients from your food.
- Tissues can join together in an abnormal way (adhesions) when scar tissue develops inside your abdomen. Adhesions do not usually cause any serious problems but can lead to bowel obstruction. You may need another operation. The risk is lower if you have keyhole surgery.
- Post-splenectomy sepsis, which is a life-threatening infection caused by bacteria (risk: less than 2 in 100). The risk is higher in the first two years. You will be given injections and will need to take long-term antibiotics to reduce this risk.

How soon will I recover?

In hospital

After the operation you will be transferred to the intensive care unit or high dependency unit for a few days, so the healthcare team can monitor you more closely. You will then go to the ward.

The healthcare team will help you with deep breathing, coughing and moving about.

It is normal for your bowels not to work for a few days and you may get diarrhoea when they do start to work. This settles with time.

You will not be given anything to eat or drink for a few days until your surgeon is satisfied that you are progressing well. You will be given fluid through the drip. The healthcare team will use the central line to monitor the pressure of blood returning to your heart. This will help your doctor to know how much fluid to give you.

If your surgeon decides you need one, you will have an x-ray to find out how well the joins are healing. If they are satisfied that the joins are healing well, you will be able to drink and the NG tube will be removed. You will then be able to eat. A dietician will monitor your progress and advise you on how to achieve and maintain a healthy weight.

The drains, drips and catheter will usually be removed after 2 to 5 days.

You should be able to go home after 10 to 14 days. However, your doctor may recommend that you stay a little longer.

If you are worried about anything, in hospital or at home, contact the healthcare team. They should be able to reassure you or identify and treat any complications.

Returning to normal activities

To reduce the risk of a blood clot, make sure you follow carefully the instructions of the healthcare team if you have been given medication or need to wear special stockings.

A distal pancreatectomy is a major operation and it will take you at least two months to recover fully. You can expect to feel tired once you return home but you should gradually feel stronger and be able to do a bit more week by week.

Regular exercise should help you to return to normal activities as soon as possible. Before you start exercising, ask the healthcare team or your GP for advice.

Do not drive until you are confident about controlling your vehicle and always check your insurance policy and with your doctor.

The future

Unfortunately, the healthcare team cannot guarantee you will be cured even after the cancer is removed by surgery. Overall about 1 in 10 people will be cured. However, there are different types of pancreatic cancer and your doctor will be able to give you a better idea of your chance of being cured once the cancer has been examined under a microscope. If the cancer is at an early stage with no lymph nodes affected, there is a higher chance of you being cured. An advanced cancer is likely to come back despite the best available treatment.

There is evidence that giving chemotherapy after surgery increases the chance of you being cured and your doctor may recommend this for you.

Even if surgery does not lead to you being cured, you should survive longer and have a better quality of life than if you did not have surgery.

If your surgeon removed your spleen, you have a higher risk of getting life-threatening infections (risk: less than 2 in 100 over a lifetime). You will be immunised against certain infections and will need to take antibiotics regularly.

If you get a high temperature, sore throat, cough, rash or pain in your abdomen, you may have an infection so contact your GP straightaway.

Contact your GP if you get bitten by an insect or animal. A minor infection can quickly become serious.

If you travel to a place where there is a risk of getting malaria, take anti-malaria tablets and use insect repellents to try to not get bitten by mosquitos.

Summary

Pancreatic cancer is a serious condition. Your tests have shown that there is a good chance of you being free of pancreatic cancer if you have surgery. However, a distal pancreatectomy is a major operation and serious complications can happen. You need to know about them to help you to make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.

Keep this information document. Use it to help you if you need to talk to the healthcare team.

Acknowledgements
Author: Mr Ian Beckingham DM FRCS
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