

Pancreatic Cancer: Surgery



Surgery can sometimes be used to treat pancreatic cancer. Different kinds of surgery may be done. The type you have depends on where the cancer is, the size of the cancer, how much it has spread, the goal of surgery, and other factors.

When might surgery be used for pancreatic cancer?

Surgery is sometimes a choice to try to remove all of the cancer if it's still small and hasn't spread (early stage). In most cases, pancreatic cancer has spread too far by the time it's found to remove it all. For more advanced cancers, surgery can sometimes be used to help prevent or relieve symptoms.

If your healthcare provider recommends surgery, be sure you understand the goal of the surgery. Is it to try to cure your cancer or is there a different goal? Surgery for pancreatic cancer is complex. It can cause major side effects, so it's important that you are healthy enough for it and you know what to expect. You should have it done at a center that has a lot of experience treating this cancer.

Types of surgery for pancreatic cancer

Surgery to determine the extent of the cancer

Staging laparoscopy

Surgery to remove pancreatic cancer is a major surgery. It's very important to know just how far the cancer has spread before attempting this type of surgery. Sometimes it can be hard to tell how far the cancer has spread based on imaging tests alone. So, your healthcare provider may recommend laparoscopic surgery first. This can give your healthcare team a better idea of exactly how far the cancer has spread. This can help them decide if surgery to remove the cancer might be a choice.

For this surgery, your surgeon makes several small cuts (incisions) in the skin over your abdomen (belly). Long, thin tools, one of which has a small video camera on the end, are put into your body through these incisions. This lets the surgeon look at your pancreas and nearby organs. They can also take biopsy samples to see how far the cancer has spread. This procedure is done using general anesthesia.

Surgery to try to remove all of the cancer

There are two main types of surgery: open surgery and minimally invasive surgery. Either type may be used to treat pancreatic cancer. Open surgery uses one larger incision. It generally requires a longer recovery time. Minimally invasive surgery uses several small incisions rather than one large incision. Small tools are put into the incisions. Recovery time is generally quicker. A laparoscope is a long tool with a camera at the end that allows the surgeon to see inside your body. This is used in laparoscopic surgery. Robotic arms may also be used to control the small tools. This is called robot-assisted surgery.

Whipple procedure (pancreaticoduodenectomy)

This is the most common surgery for removing tumors from the pancreas. It's used for cancers in the head of the pancreas. In this complex surgery, your surgeon removes:

- Head of your pancreas (the right part of the pancreas next to the small intestine), and sometimes the body of the pancreas (the middle portion of the pancreas) as well
- Duodenum (first part of the small intestine)
- Sometimes part of your stomach

- Gallbladder and part of the common bile duct
- Sometimes nearby lymph nodes

After this surgery, bile from your liver, food from your stomach, and digestive juices from the remaining part of your pancreas all go right into your small intestine. You can still digest foods, but some people might need to take pancreatic enzyme pills to help with this.

This surgery can be done by open surgery or a minimally invasive procedure. The procedure may last 4 to 6 hours or longer.

Total pancreatectomy

You may have this surgery if the cancer has spread through your pancreas, but not beyond it. This is done much less often than the other types of surgery. In this surgery, your surgeon removes the:

- Entire pancreas
- Part of your small intestine called the duodenum
- Part of your stomach
- Spleen
- Gallbladder and part of the common bile duct
- Nearby lymph nodes

This is usually done as open surgery.

Once your surgeon removes your pancreas, you won't be able to make pancreatic juices or insulin. You'll have diabetes, so you'll need to test your blood sugar levels, give yourself insulin shots, and take other steps to keep your blood sugar in check. You'll also need to take pancreatic enzyme pills to aid in digestion when you eat.

Distal pancreatectomy

This surgery might be a choice if the cancer is on the left side of the pancreas in the body or tail of your pancreas, or both. For this surgery, your surgeon removes the middle section of the pancreas called the body and the tail of your pancreas. They may also take out your spleen. This surgery is seldom done because tumors in the tail of the pancreas have usually spread by the time they're found. This surgery is done either as open surgery or minimally invasive.

Palliative procedures

For more advanced cancers, sometimes other procedures can help with certain symptoms. But these surgeries cannot cure the cancer. They may help restore bile flow, allow food to leave your stomach and go into your small intestine, or ease pain.

For instance, surgery may relieve a blocked bile duct by creating a new path around it. Surgery may also relieve a blockage where your stomach connects to the first part of your small intestine (duodenum) by bypassing it. Another choice for blockages like these is to put in a stent. This is a metal or plastic tube that's pushed through the blockage. It keeps the passage way open so fluid and food can flow through like they're supposed to.

These are some other kinds of palliative surgery:

- Surgery to redirect the flow of bile so it goes right into your small intestine (biliary bypass)
- Surgery to allow your stomach to empty into another part of your small intestine (jejunum)
- Injections to block or numb nerves near your pancreas to prevent or relieve pain

- Cutting nerves near your pancreas to prevent or relieve pain
- Putting a tube through your skin and into your belly to drain fluid (percutaneous drainage)

Possible risks, complications, and side effects of surgery

All surgery has risks. Some of the risks of any major surgery include:

- Reactions to anesthesia
- Excess bleeding
- Blood clots in your legs or lungs
- Damage to nearby organs

Risks from surgery for pancreatic cancer

Along with the risks above, pancreatic cancer surgery can sometimes cause other problems.

Infection

Pancreatic cancer surgery increases your risk for infection. Healthcare providers can treat some skin infections by allowing them to drain and by using clean dressings. More serious infections can occur inside your abdomen (belly). These may lead to more surgery. Antibiotics are often very helpful in treating infections.

Anastomotic leak

After your surgeon removes parts of your stomach, intestines, or bile ducts, the surgeon attaches them back together. Leaks can sometimes occur at these spots. If the leak is small, treatment may include observation and changes in your diet. This lets the leak heal itself over time. If the leak is large, it can be life-threatening. You'll need surgery to repair the leak.

Changes in bowel function and what you can eat

Some people might need to take enzyme pills or change their diets. They might also have different bowel patterns after surgery.

Diabetes

If a large part of your pancreas is removed, you might have trouble controlling your blood sugar levels. You might need to take insulin. If your entire pancreas is removed, you won't be able to make insulin and will need to take insulin to manage blood sugar levels.

Getting ready for your surgery

Before surgery, you'll meet with a surgeon to talk about it. At this time, ask any questions and share concerns you may have. This is also a good time to review the side effects of the surgery and talk about its risks. You might ask if the surgery will leave scars and what those scars will look like. You might also want to ask when you can expect to return to your normal activities. After you have talked about all the details with your surgeon and you agree to proceed with the surgery, you'll sign a surgical consent form that gives permission to your healthcare provider to do the surgery.

A few days before your surgery, your healthcare provider might give you laxatives and enemas to help clean out your colon. They will tell you when and how to use these. You may also be told to follow a special diet.

On the day of your surgery, you should arrive at the hospital admission area a couple of hours before the time your surgery is set to start. There, you'll complete the needed paperwork and go to a preoperative area. There,

you'll undress and put on a hospital gown. During this time, your healthcare team will ask you about your health history. They'll also ask about medicine allergies and talk about the procedure. Try not to get frustrated by the repetition. These questions are repeated to help make sure your information is correct and prevent mistakes.

While you're in the preoperative area, an anesthesiologist or a nurse anesthetist will evaluate you. They will also explain the anesthesia you'll get during surgery. The purpose of the anesthesia is to put you to sleep so that you won't feel any pain. Be sure to answer all the questions thoroughly and honestly. This helps prevent complications. Also, ask any questions you have about your anesthesia. You'll sign an anesthesia consent form that states that you understand the risks and give permission to administer anesthesia.

Your surgeon will also see you in the preoperative area. You can ask any last-minute questions you have. This can help put your mind at ease.

What to expect during surgery

When it's time for your surgery, you'll be taken into the operating room. There will be many people there. These include the anesthesiologist, surgeon, and nurses. Everyone will be wearing a surgical gown and a face mask. Once in the room, someone will move you onto the operating table. If it hasn't already been done, your anesthesiologist or nurse will put an intravenous line (IV) into your arm. This requires just a small skin prick. Someone will put special compression stockings on your legs to help prevent blood clots. ECG (electrocardiogram) wires with small, sticky pads on the end will be attached to your chest. This is done to keep track of your heart. You'll also have a blood pressure cuff wrapped around your arm.

During surgery, a small catheter may be placed through your urethra and into your bladder. This is a soft, hollow tube that drains your urine into a bag. You'll also have a breathing tube put in your windpipe (trachea). A breathing machine (ventilator) will control your breathing. A nasogastric tube may be put in your nose. This is a suction tube that goes through your esophagus and into your stomach to drain out stomach contents.

What's removed during surgery and where the incisions (cuts) are depend on the type of surgery you have. This is based on where the tumor is.

After surgery, you'll be moved to the postanesthesia care unit (PACU). There, your healthcare providers will keep track of your condition for about 1 to 2 hours. When you wake up, don't be alarmed by the number of tubes and wires attached to you. These are normal after surgery. When you're fully awake and stable in the PACU, your family may be able to see you for a short time. Soon after that, if you remain awake and stable, the staff will move you to a regular hospital room.

What to expect after surgery

Your hospital stay will depend on the type of surgery you had. Recovery after you leave the hospital may take a month or more.

For the first few days in the hospital after surgery, you're likely to have pain. It can be controlled with medicine. Your healthcare provider will prescribe this for you. You may have an epidural catheter in your lower back so that it's easier to give you pain medicine. You may have a patient-controlled analgesia pump. This is an IV form of pain medicine programmed so that you may control it by pressing a button. Before you leave the hospital, your healthcare provider will start you on an oral pain medicine instead of the IV pain medicine. Talk with your healthcare team about your choices for pain relief. Some people are hesitant to take pain medicine, but doing so can help you heal and recover. If your pain is not controlled well, for instance, you may not want to cough or get out of bed. You need to do these things to help prevent problems like pneumonia and blood clots.

Your healthcare provider may have put a small tube (called a drain) in your lower stomach during surgery. There may be more than one. You may go home with one or more drains still in place. If so, you will be taught how to care for them.

You may feel tired or weak for many months. The amount of time it takes to heal is different for each person.

You may have constipation from using pain medicine, not moving around, or not eating or drinking very much. Talk with your healthcare provider about how to prevent and treat constipation if it occurs.

If your entire pancreas was removed, you no longer make insulin. This leads to diabetes. You'll need to learn how to test your blood sugar and to give yourself insulin shots. The diabetes specialist will help you learn to manage diabetes. They will teach you about the diet you should follow, how to test your blood sugar, and how to keep your blood sugar levels within a normal range.

If your surgeon removed your pancreas, or it can no longer make enzymes, you may need to take digestive enzyme pills when you eat. These help you digest food.

You'll also need follow-up care after surgery. Make an appointment with your surgeon and get any other information for home care and follow-up when you leave the hospital. Be sure you know what to do and understand all the instructions you're given.

Your healthcare provider will also talk with you about when to call. You may be told to call if you have any of the following:

- New pain or pain that gets worse
- Signs of an infection, such as a fever or chills
- Wound problems
- Trouble controlling your blood sugar

Ask your healthcare provider what signs to watch for and when to call. Know how to get help after office hours and on weekends and holidays.

Talk to your healthcare team

If you have any questions about your surgery, talk to your healthcare team. They can help you know what to expect before, during, and after your surgery.

© 2000-2027 The StayWell Company, LLC. All rights reserved. This information is not intended as a substitute for professional medical care. Always follow your healthcare professional's instructions
This information is not intended as a substitute for professional medical care. Always follow your Healthcare professional's instructions. Copyright Krames LLC.