Pancreatic Cancer: Tests After Diagnosis

After a diagnosis of pancreatic cancer, you will likely need other tests. These tests help your healthcare team learn more about the cancer. They can help show if the cancer has grown into nearby areas or spread to other parts of your body (metastasis). The test results help your healthcare team decide the best ways to treat the cancer. If you have any questions about these or other tests, talk with your healthcare team.

Tests you may have can include:

- CT scan
- MRI
- PET scan
- CT angiography or MR angiography
- ERCP (endoscopic retrograde cholangiopancreatography) or MRCP (magnetic resonance cholangiopancreatography)
- Endoscopic ultrasound (EUS)
- Laparoscopic surgery
- Blood tests

Imaging tests

Imaging tests might be used to help learn the extent of the cancer in your body. One of the most important things your healthcare providers will look for is if the cancer looks like it can be removed by surgery. Surgery is often the preferred treatment if it can be done.

CT scan

A CT scan uses X-rays taken from different angles and a computer to get detailed 3-D pictures of the inside of your body. A CT scan might be done to look inside your chest, belly (abdomen), or pelvis. The pictures help your healthcare provider see where the cancer is. They can also show if the cancer has spread to nearby lymph nodes or to other organs, like your liver.

To have the test, you'll lie still on a table as it slowly slides through the center of the ring-shaped CT scanner. A CT scan is painless. You may be given an IV (intravenous), oral contrast medium, or both to swallow before the scan. This helps tumors and other changes show up better on the scans. The contrast will slowly pass through your system. Then it will exit through your urine and bowel movements.

MRI

An MRI uses powerful magnets, radio waves, and a computer to make detailed pictures of the inside of your body. It doesn't use X-rays. An MRI can show small tumors and the extent of your cancer. It's also used to see if the cancer has spread to other parts of your body. If it has, an MRI can also show the size and extent of the spread. Your healthcare provider may also do an MRI if the results of an X-ray or CT scan aren't clear. You may be injected with a contrast medium in your vein before getting the scan to help make the pictures clearer.

MRIs aren't painful. But they take a long time, up to an hour or so. During that time, you'll lie still on a table that slides into a long, narrow tube. Some people say the test makes them feel claustrophobic. If you've had problems with enclosed spaces in the past, tell your healthcare provider before the test. They may give you a sedative to help you stay calm during the test. Newer, more open MRI machines can sometimes be used

instead. But the images may not be as sharp. The equipment also makes loud banging noises. You can ask for earplugs if you think the noise will bother you.

PET scan

Your healthcare provider may use a PET scan to look for the spread of cancer to lymph nodes or other parts of your body. A PET scan can also be helpful if your healthcare provider thinks the cancer may have spread, but doesn't know where. This is because it scans your whole body. The picture is not as detailed as a CT scan. But it's often used along with a CT scan to look for tumors. This is called a PET-CT scan.

For this test, you're injected with a mildly radioactive sugar about an hour before the scan. Cancer cells absorb more of this sugar than normal cells. The radioactive material then shows up on the image from the scan. To have the scan, you'll lie still on a table that's pushed into the PET scanner. The process may take several hours. A PET scan is painless and the machine doesn't touch you. But if you're sensitive to the sugar, you may have side effects. These can include headache, nausea, or vomiting. The tracer passes out of your body in your urine.

CT or MR angiography

An angiogram is a test that is used to look at blood vessels in and around the pancreas. This type of test can be useful in finding out if a pancreatic cancer has grown into nearby major blood vessels. This can help your healthcare team decide if the tumor can be removed without damaging the blood vessels. It can also help them plan the surgery.

In the past, this test was often done by threading a small tube (catheter) through an artery (often in your inner thigh) to the pancreas and then injecting a dye. Then X-rays were taken of the area. Today this test is more often done using a CT scanner (CT angiography) or an MRI scanner (MR angiography). A catheter in the artery isn't needed to complete the test, but you may need contrast injected through an IV line in your hand or arm during the imaging.

ERCP or MRCP

These tests look at your bile ducts and pancreatic duct to see if there are any blockages. These tests are sometimes used to help plan surgery.

ERCP is a type of X-ray test. Medicines are used to put you into a deep sleep. Then your healthcare provider puts a long, flexible tube (called an endoscope) down your throat, through your stomach, and into your small intestine. They slip a smaller, soft tube (catheter) through the endoscope into the common bile duct. Then a contrast medium is injected through the tube. It goes into your bile and pancreatic ducts. Your healthcare provider then takes X-rays of the area. This is done to look for any areas that may mean there is a blockage by a tumor. If a blocked duct is seen, your provider may put a small plastic or metal tube (called a stent) into the duct to help keep it open.

MRCP is a lot like ERCP except it uses an MRI instead of an endoscope. MRCP can show both the bile ducts and the pancreatic duct without the need for an endoscope to be passed into the duct. But unlike ERCP, it does not use contrast and this test can't be used to put a stent into a blocked duct.

EUS

A small ultrasound probe is placed on the tip of a flexible tube (endoscope). It is put into your mouth and down into the small intestine. The ultrasound uses sound waves and a computer to form pictures of your pancreas. This helps see where the tumor has grown. A biopsy may also be done at the same time.

Laparoscopic surgery (staging laparoscopy)

Sometimes it can be hard to tell just how far the cancer has spread based on imaging tests alone. If this is the case, you may need laparoscopic surgery. This procedure 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, you will be given general anesthesia to put you to sleep. Then several small cuts are made in the skin over your belly. Long, thin tools are put in through these cuts. One of the tools has a small video camera on the end (laparoscope). This lets your surgeon look at the pancreas and nearby organs. They can also take biopsy samples of any changes seen to see if or how far the cancer has spread.

Blood tests

If you've been diagnosed with pancreatic cancer, blood tests can check the disease and your health.

CA19-9

This is a tumor marker. This substance can sometimes be found in the blood if a person has cancer. If your CA19-9 level is high, this test might be used to help keep track of your cancer during treatment. The levels should drop if treatment is working. If all of the cancer has been removed, this test can also check if the cancer is coming back.

Liver function tests (LFTs) and blood chemistry tests

These tests look for certain chemicals in your blood. They can help tell how your liver, kidneys, and other organs are working.

Working with your healthcare provider

Your healthcare provider will talk with you about which tests you'll have. Make sure to get ready for the tests as instructed. Ask questions and talk about any concerns you have.