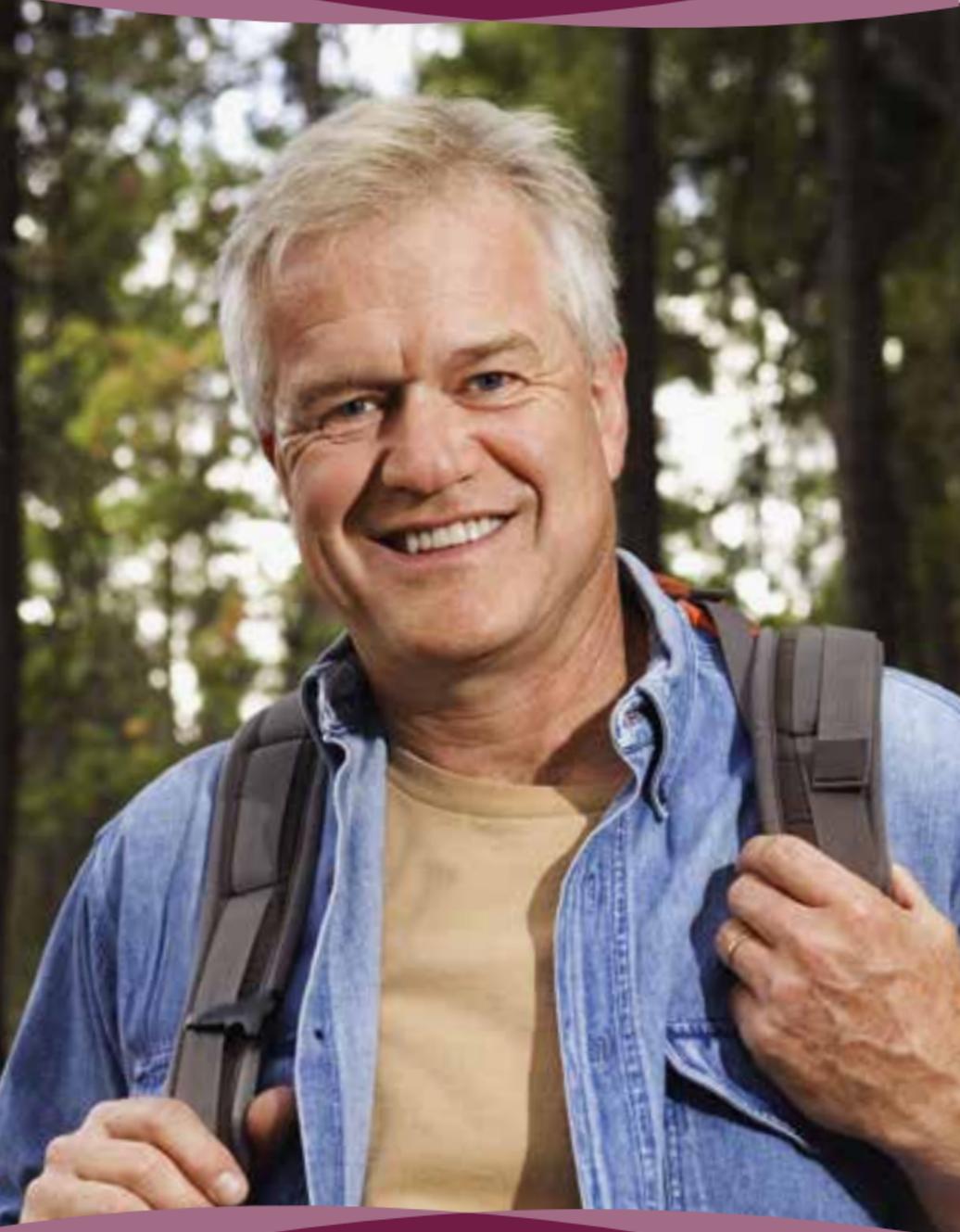


# Facing Pancreatic Surgery?

Learn about minimally invasive  
*da Vinci*® Surgery



*da Vinci*.Surgery

# The Condition:

## Pancreatitis/Pancreatic Cancer

The pancreas is an organ that makes enzymes and hormones to help your body digest food and regulate blood sugar. The pancreas is located behind your stomach and is about 6 inches long.

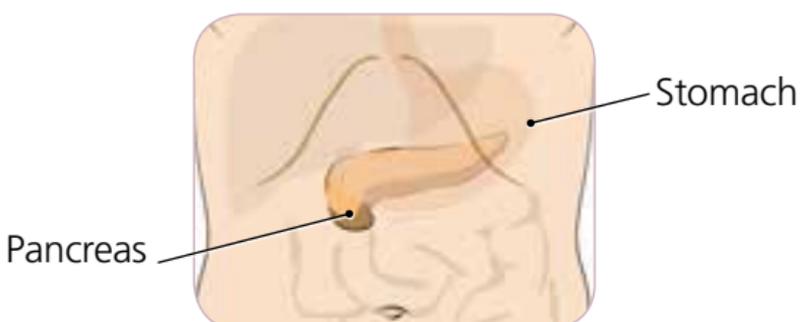
Pancreatitis is a disease in which the pancreas becomes inflamed. It can be acute or chronic.

**Acute pancreatitis** occurs suddenly and usually goes away in a few days with treatment.<sup>1</sup> Symptoms may include: pain, swelling or tenderness in the upper abdomen, nausea, vomiting, back pain, and fever.

**Chronic pancreatitis** occurs over many years and can lead to permanent damage.<sup>1</sup> Symptoms may include: upper abdominal pain, nausea, vomiting, diarrhea, and oily stool.

Pancreatitis often develops between ages 30 and 40. The most common causes are: gallstones, heavy alcohol use, cystic fibrosis, high triglycerides (fat in the blood), certain medicines, and structural problems in the pancreas.

**Pancreatic cancer** is hard to detect in its early stages since it often does not cause symptoms until the cancer has grown.<sup>2</sup> If symptoms are present, they may include: yellowing skin or eyes, pain in the abdomen and back, loss of appetite, depression and blood clots. Some risk factors include: smoking, obesity, diabetes, chronic pancreatitis, and certain inherited disorders.



# Treatment/Surgery

Your doctor will suggest a treatment plan based on the severity of the disease and your overall health. If surgery is suggested, the type of surgery (listed below) will depend on how much of your pancreas is affected.

When cancer is suspected, your surgeon will remove your pancreas and send it to a lab to be tested for cancer.

**Distal Pancreatectomy:** If the bottom half or tail of the pancreas is affected and needs to be removed, this is known as a distal or segmental pancreatectomy.

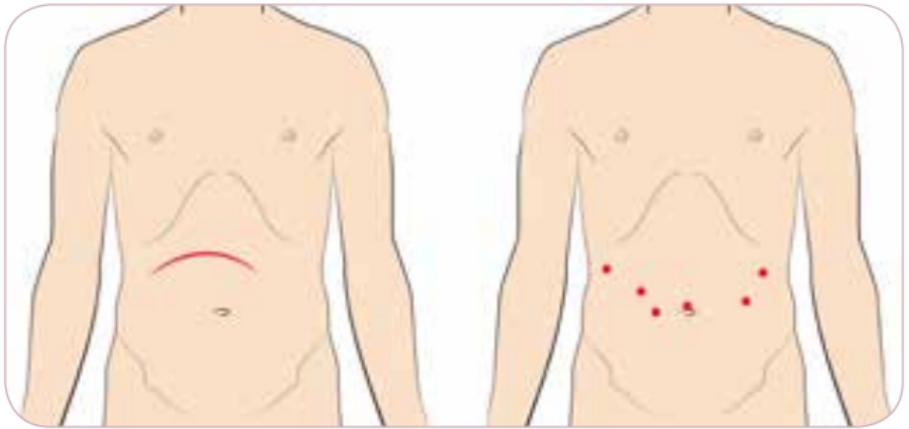
**Whipple Pancreatectomy:** During the Whipple procedure, the head of the pancreas, most of the duodenum (part of small intestine), gallbladder, part of bile duct, and nearby lymph nodes are removed.

**Ampullectomy:** During an ampullectomy, the surgeon removes any tumors that are located where the bile and pancreas ducts meet.



Surgery on the pancreas can be done using traditional open surgery (through one large incision) or minimally invasive surgery.

Minimally invasive surgery (laparoscopy) is done through a few small incisions using long, thin surgical instruments and a tiny camera. The camera takes images inside your body. These images are sent to a video screen in the operating room to guide surgeons as they operate.



Open Surgery  
Incision

*da Vinci* Surgery &  
Laparoscopy Incisions



# *da Vinci* Surgery:

## A Minimally Invasive Surgical Option

*da Vinci* technology enables your surgeon to operate through a few small incisions (cuts), like traditional laparoscopy, instead of a large open incision.

The *da Vinci* System is a robotic-assisted surgical device that your surgeon is 100% in control of at all times. The *da Vinci* System gives surgeons:

- A 3D HD view inside your body
- Special wristed instruments that bend and rotate far greater than the human hand
- Enhanced vision, precision and control

If you are a candidate for minimally invasive surgery, ask your doctor about the potential benefits of *da Vinci* Surgery.

**Risks & Considerations Related to Pancreatic Surgery** (removal of all/part of the pancreas): inflamed pancreas, leak of pancreatic or bile juices, narrowing or leaking at the spot where the pancreas is connected to the bowel, injury to the spleen or bowel, insufficient pancreatic function (for example, diabetes), diarrhea, poor stomach emptying.

## **Important Information for Patients:**

Serious complications may occur in any surgery, including *da Vinci*<sup>®</sup> Surgery, up to and including death. Examples of serious or life-threatening complications, which may require prolonged and/or unexpected hospitalization and/or reoperation, include but are not limited to, one or more of the following: injury to tissues/organs, bleeding, infection and internal scarring that can cause long-lasting dysfunction/pain.

Risks of surgery also include the potential for equipment failure and/or human error. Individual surgical results may vary. Risks specific to minimally invasive surgery, including *da Vinci* Surgery, include but are not limited to, one or more of the following: temporary pain/nerve injury associated with positioning; temporary pain/discomfort from the use of air or gas in the procedure; a longer operation and time under anesthesia and conversion to another surgical technique. If your doctor needs to convert the surgery to another surgical technique, this could result in a longer operative time, additional time under anesthesia, additional or larger incisions and/or increased complications.

Patients who are not candidates for non-robotic minimally invasive surgery are also not candidates for *da Vinci*<sup>®</sup> Surgery. Patients should talk to their doctor to decide if *da Vinci* Surgery is right for them. Patients and doctors should review all available information on non-surgical and surgical options in order to make an informed decision. For Important Safety Information, including surgical risks, indications, and considerations and contraindications for use, please also refer to [www.davincisurgery.com/safety](http://www.davincisurgery.com/safety) and [www.intuitivesurgical.com](http://www.intuitivesurgical.com).

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## The Enabling Technology: *da Vinci* Surgical System

The *da Vinci* Surgical System is designed to provide surgeons with enhanced capabilities, including high-definition 3D vision and a magnified view. Your doctor controls the *da Vinci* System, which translates his or her hand movements into smaller, precise movements of tiny instruments inside your body.



Though it is often called a “robot,” *da Vinci* cannot act on its own. Surgery is performed entirely by your doctor. *da Vinci* technology allows your doctor to operate through just a few small openings, similar to traditional laparoscopy.

The *da Vinci* System has brought minimally invasive surgery to more than 3 million patients worldwide. *da Vinci* - changing the experience of surgery for people around the world.

Your doctor is one of a growing number of surgeons worldwide offering *da Vinci*<sup>®</sup> Surgery.

For more information and to find a *da Vinci* Surgeon near you, visit:

[www.daVinciSurgery.com](http://www.daVinciSurgery.com)

<sup>1</sup> National Digestive Diseases Information Clearinghouse (NDDIC); Pancreatitis. Available from: <http://digestive.niddk.nih.gov/ddiseases/pubs/pancreatitis/>.

<sup>2</sup> American Cancer Society, Signs and symptoms of pancreatic cancer. Available from: <http://www.cancer.org/cancer/pancreaticcancer/detailedguide/pancreatic-cancer-signs-and-symptoms>.