Your pancreas is a 6 inch (15.24 cm) gland located below your liver, between your stomach and your spine. The pancreas is made up of 3 parts: a “head” that is tucked into the duodenum (the upper part of the small intestine); a flattened, longer “body;” and a “tail” that is connected to the spleen.

Your pancreas makes potent digestive enzymes and hormones that help manage blood glucose (blood sugar). Normally, these enzymes and hormones do not become active until they exit the pancreas and enter other parts of the body.

Your pancreas also produces bicarbonates that neutralize stomach acids. Small ducts (tubes) move these fluids into a larger pancreatic duct, down into the duodenum. The common bile duct also carries bile (a substance that breaks down fats) from your liver and gall bladder through the head of the pancreas into your small intestine.

An inflammation of the pancreas is called pancreatitis. Pancreatitis can either be acute (a sudden, sharp, and/ or severe attack) or chronic (recurring and/or lasting for a long period of time). When the pancreas is inflamed, digestive enzymes become activated while still inside the pancreas, which can cause the pancreas to begin “digesting” its own tissues.

The two most common causes of pancreatitis are gallstones (bile that has hardened into little pebble-like masses) and chronic, heavy alcohol use. Pancreatitis can also result from certain diseases or injury. Pancreatic pseudocysts can develop as a serious complication of pancreatitis.
A pancreatic cyst is a closed sac lined with epithelium and located on or in your pancreas. Pancreatic cysts contain fluid. They can range from benign pseudocysts (see below) to malignant cysts (cancerous and spreading). There are several different types of pancreatic cysts. Some pancreatic cysts result from certain rare diseases, such as von Hippel-Lindau disease (a genetic disorder).

**What is a pancreatic pseudocyst?**

A pancreatic pseudocyst is a type of cyst that it is not contained inside an enclosed sac of its own with an epithelium lining. Instead, the pseudocyst forms within a cavity or space inside the pancreas and is surrounded by fibrous tissue. Pancreatic pseudocysts do contain inflammatory pancreatic fluid (particularly the digestive enzyme amylase) or semisolid matter.

Pancreatic pseudocysts:
- Are health problems caused by acute or chronic pancreatitis.
- Are caused by a blockage in the pancreatic ductal system.
- Are round or oval in shape.
- Are the most common pancreatic cystic lesions (about 75% to 80% of all pancreatic cystic lesions).
- Are benign (non-cancerous).
- Affect approximately 1 in 1,000 adults per year.

**What are the symptoms of pancreatic cysts or pseudocysts?**

Pancreatic cysts, including pseudocysts, can be asymptomatic (having no obvious symptoms) or can produce moderate to severe symptoms. Symptoms may occur within days to months following a pancreatitis attack. When present, the most common symptoms include:
- Severe, persistent pain in the abdomen and sometimes the back
- Nausea
- Vomiting
- Abdominal bloating

**What are the complications of pancreatic cysts/pseudocysts?**

Rarely, complications can come from pancreatic cysts/pseudocysts, including:
- Infection, which can sometimes lead to pancreatic abscess
- Pseudocyst rupture (breaking open) or hemorrhage (bleeding), which can happen without warning and which can be life-threatening
- Biliary complications, which can occur when a large cyst blocks the common bile duct, causing skin, mucous membranes, and whites of the eyes to
appear yellow (obstructive jaundice)

- Portal hypertension, or high blood pressure of the splenic vein/portal vein, which requires surgery

**How are pancreatic cysts and pseudocysts diagnosed?**

Pancreatic pseudocysts can be hard to diagnose because the symptoms can be similar to various other diseases. Since the pancreas is located deep inside the abdominal cavity, cross-sectional imaging is often used to locate and diagnose pancreatic cysts and pseudocysts.

Testing may include:

- Transabdominal US (ultrasound), which uses sound waves to detect a pancreatic pseudocyst, or gallstones that could potentially cause a pseudocyst.
- Abdominal CT (computed tomography) scan, which usually provides all the diagnostic information necessary, and shows more detailed surrounding anatomy and pathology information than ultrasound does.
- MRI (magnetic resonance imaging) and MRCP (magnetic resonance cholangiopancreatography), though not typically used, provide sharper imaging of fluids and debris in pseudocysts than CT scans do.
- EUS (endoscopic ultrasound) is usually a secondary test (following US, CT, or MRI) to further evaluate a pancreatic cyst and/or to distinguish a pancreatic pseudocyst from other types of cystic lesions. Analysis of fluid obtained by the cyst via a fine needle is then used to differentiate between types of cysts and pseudocysts.
- ERCP (endoscopic retrograde cholangiopancreatography) enables the doctor to view the structure of the common bile duct, other bile ducts, and the pancreatic duct.

**How are pancreatic cysts and pseudocysts treated?**

Most pseudocysts resolve themselves without treatment, over time. However, when symptoms become persistent, complications emerge, or cysts become larger than 6 centimeters in size, drainage is indicated.

There are three methods of cyst drainage:

- Endoscopic drainage
- Percutaneous catheter drainage, which uses hollow tube inserted into the body to remove fluid
- Surgical drainage, either via open surgery or laparoscopic surgery (using a laparoscope, a surgical tool that only requires a small incision)

Endoscopic drainage is gaining acceptance because it is less invasive, has less risk of complications than open surgery, does not require an external drain, and its long-term success rate is high.

**What is the prognosis?**
Pseudocysts should be drained when they are causing symptoms. Some cysts require surgical removal if there is a concern for cancer or a precancerous condition.

In most cases, the prognosis is generally positive for people who undergo treatment for pancreatic cysts and pseudocysts.

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