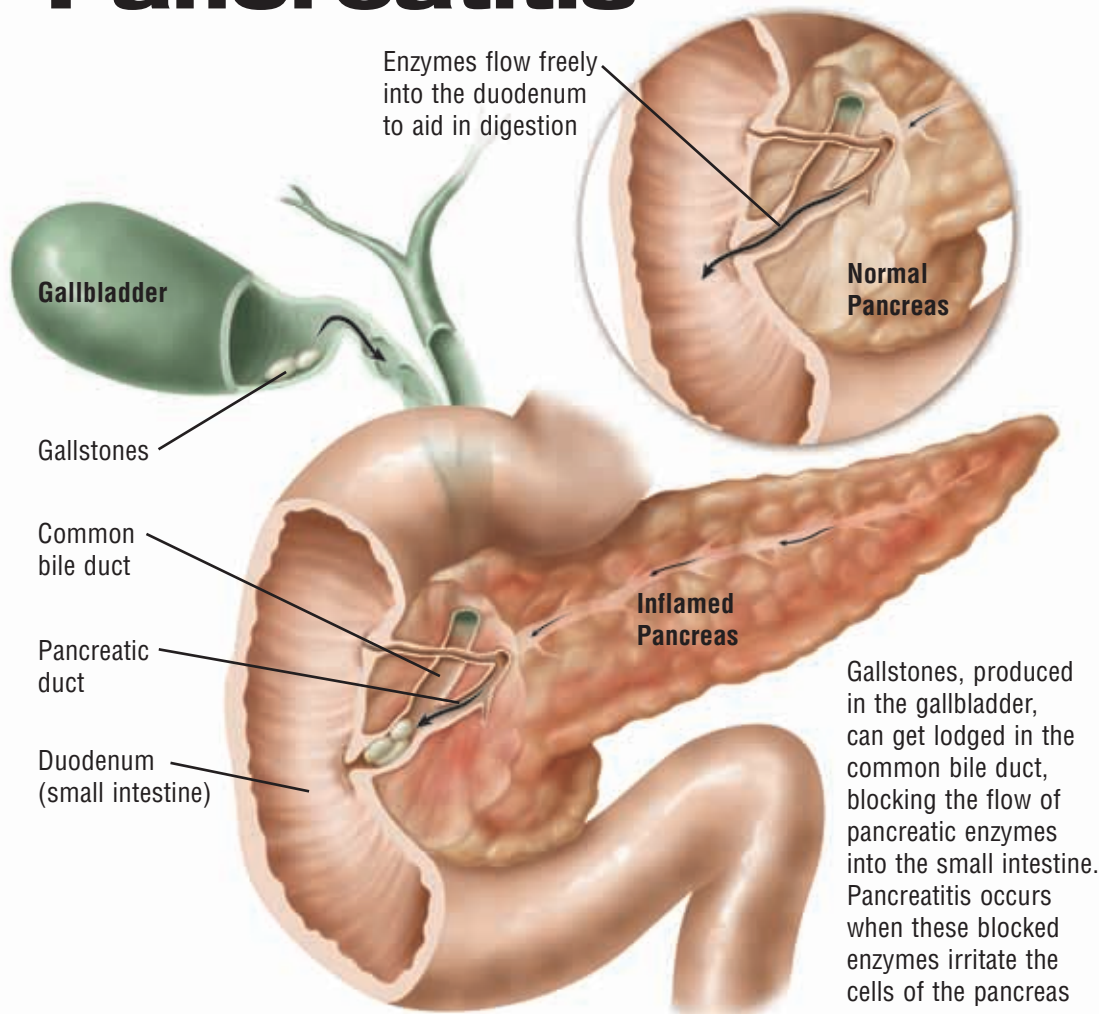


# Pancreatitis



## Acute or Chronic Inflammation of Endocrine Gland

*Pancreatitis is an inflammation of the pancreas, the gland behind the stomach that produces insulin and enzymes that help digest food. The pancreas can become inflamed as a result of alcoholism, gallstones, or infection, among other reasons. The inflammation can develop quickly over a period of days (acute pancreatitis) or can develop and continue for years (chronic pancreatitis). It can be a mild*

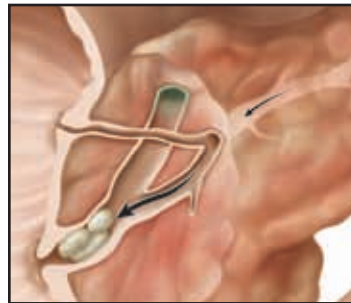
*inflammation that heals quickly with the proper treatment, or a severe condition that can lead to serious diseases such as diabetes, kidney failure, or cancer of the pancreas.*

*Symptoms of acute pancreatitis include pain in the abdomen that can move to the lower back area. The pain often feels worse with eating, but better in the fetal position. Acute pancreatitis can also cause nausea and vomiting. In chronic pancreatitis, the abdominal pain is also associated with weight loss and oily, foul-smelling bowel movements. Laboratory tests of the blood, urine, and stool are performed to look for signs of inflammation and abnormal amounts of pancreatic enzymes. Other tests often performed in the diagnosis of pancreatitis include abdominal x-ray, ultrasound testing, CT scan, and MRI.*

*Treatment depends on the type of pancreatitis, its cause, and its severity. Patients may require a hospital stay to treat pain and allow the pancreas to rest by restricting food and fluids by mouth. Patients are rehydrated with intravenous fluids and nutrition is restored with special feedings. The specific cause of the pancreatic inflammation will determine further treatment.*

## Alcohol Abuse and Smoking Are Major Risk Factors for the Disease

The pancreas is responsible for producing hormones and enzymes that help regulate blood sugar and food digestion. The digestive enzymes produced in the pancreas are not activated until after they are released by the pancreas into the small intestine. If these enzymes become active while they are still in the pancreas, they can irritate the pancreatic tissue and lead to inflammation. Conditions that can cause the digestive enzymes to inflame the pancreas include excess alcohol, gallstones, infections, trauma to the abdomen, or pancreatic cancer. People with ulcers, elevated triglycerides, cystic fibrosis, or a family history of pancreatitis and those who smoke are also at higher risk. People with frequent bouts of acute pancreatitis can develop scar tissue in the pancreas, leading to chronic pancreatitis.



*Inflammation occurs when pancreatic enzymes irritate the cells of the organ.*

### Presentation and Diagnosis

Symptoms of acute pancreatitis include significant upper abdominal pain, nausea, and vomiting. In severe cases, patients may become dehydrated and go into shock when other organs begin to fail or the pancreas begins to bleed internally. Chronic pancreatitis also causes abdominal pain, but it is more often associated with digestive problems and oily, foul-smelling bowel movements. Patients with long-standing pancreatitis often lose weight due to a lack of digestive enzymes needed to break down nutrients from food. Diabetes can also result from chronic inflammation of the pancreas, since the scar tissue in the pancreas means that there are fewer healthy cells to produce insulin. Pancreatitis can also lead to infection of the inflamed tissue in the pancreas, requiring surgery.

Diagnosis is based on a series of tests to measure the effect of the inflammation in blood, urine, and stool samples. Studies that allow a view of the pancreas include x-rays, CT scans, ultrasound procedures, and MRIs.

### Treatment Options

Treatment of an acute episode of pancreatitis usually means stabilizing the patient in the hospital to allow the pancreas to rest. This means that no food or liquids can be taken by mouth for several days, during which time fluids are administered intravenously and abdominal pain is treated. When the inflammation and pain begin to subside, the patient can begin drinking and eating soft foods, and eventually resume a more normal diet. In cases of chronic pancreatitis, a low-fat, highly nutritious diet is necessary, and pancreatic enzyme supplements may be prescribed for use before meals to help break down food into useful nutrients. Alcohol is a significant cause of pancreatitis and should be avoided completely. Smoking is another risk factor for pancreatitis, and smoking cessation is an important way to help prevent future attacks. Patients with a history of pancreatitis should drink plenty of fluids daily to prevent dehydration.

Depending on the cause of pancreatitis, other procedures may be needed to avoid future bouts of inflammation and the development of chronic pancreatitis. If a bile duct blockage or gallstones were a cause of the condition, surgery may be indicated to correct the problem. If alcohol was the cause, an abstinence program may be needed to help prevent future damage. Infected tissue or pockets of fluid known as pseudocysts may require surgical removal.

Diagnosis and treatment of acute or chronic pancreatitis can also be performed using a procedure known as *endoscopic retrograde cholangiopancreatography* (ERCP). ERCP uses a tiny camera on the end of a tube to view the pancreas without a surgical incision. The tube is inserted down the throat and through the stomach and small intestine to the pancreas, where the area can be seen and minor surgical procedures can be performed to correct the cause of the pancreatitis.

If you have questions about pancreatic enzyme supplements or pain medications prescribed for pancreatitis, ask your pharmacist.