

What is Pancreatitis?

PATIENT/FAMILY INFORMATION SHEET

What is the pancreas?

The pancreas is a large gland behind the stomach and near the duodenum (upper part of the small intestine). The pancreas has two main functions in the body:

- It secretes enzymes or special proteins that help to digest fats, proteins, and carbohydrates in foods eaten.
- It regulates blood sugar levels in the body.

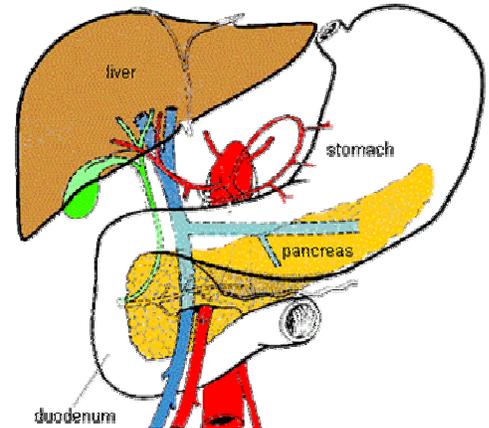


Image Source:
www.nurseminerva.co.uk/images/pancreas.gif

What is pancreatitis?

Pancreatitis is an inflammation of the pancreas. It begins as acute pancreatitis and can become a chronic condition if untreated. Acute pancreatitis occurs suddenly and patients are usually able to recover after treatment. Chronic pancreatitis occurs if there is continual damage to the pancreas after the acute episode. Pancreatitis causes the pancreas to function poorly resulting in weight loss and digestive disorders. It may also cause very high or low blood sugar levels in the body which can lead to coma.

Both forms are serious conditions that can lead to tissue damage, bleeding, infection, and cysts.

What causes pancreatitis?

Acute pancreatitis is usually caused by gallstones or by chronic alcohol use. Gallstones may block the duct or tube in which the digestive enzymes travel from the pancreas to the small intestines. These enzymes may then begin to damage the tissue in the pancreas. There are also other possible causes if either of these has been ruled out. It is important to be evaluated for the cause so that the right treatment can be started.

Chronic pancreatitis occurs after an acute episode if injury to the pancreas continues. This injury is caused by the digestive enzymes attacking and damaging the nearby tissue in the pancreas. This may happen as a result of:

- Many years of alcohol abuse
- A blocked or narrowed pancreatic duct from trauma or cyst formation
- Congenital conditions
- Cystic Fibrosis
- Some drugs
- An unknown cause, referred to as "idiopathic"

What are the symptoms of pancreatitis?

Acute

- Pain in the abdomen and/or back
- Swollen and tender abdomen
- Nausea and vomiting
- Fever
- Dehydration
- Rapid pulse rate
- Severe cases may lead to bleeding, low blood pressure, and shock

Chronic

- Abdominal and/or back pain that may become worse with eating or drinking
- Nausea and vomiting
- Weight loss
- May lead to diabetes from damaged insulin-producing cells
- Severe cases may also lead to bleeding, low blood pressure, and shock

How is pancreatitis diagnosed?

During *acute pancreatitis*, blood can be tested for high levels of digestive enzymes. There may also be high levels of other substances in the blood, such as calcium, magnesium, sodium, potassium, bicarbonate, sugar, and lipids. The blood levels usually return to normal after recovery.

Chronic pancreatitis is generally diagnosed through pancreatic function blood tests and through diagnostic imaging exams to see the structures inside the body.

How is pancreatitis treated?

Treatment depends upon the severity:

- Medications will be given for pain relief.
- You may not be allowed to eat or drink anything during the acute period.
- Once a diet is ordered, it will be low in fat.
- Intravenous fluids may be required to prevent dehydration or extreme loss of body fluids from nausea and vomiting.
- Gallstones usually require surgical removal. After they have been removed, acute pancreatitis usually resolves on its own.
- Pancreatic cysts may require draining or surgical removal.
- With chronic pancreatitis, pancreatic enzymes may be prescribed to take with meals. These enzymes will help the body to digest foods and to support weight gain.
- Insulin may be ordered to control high blood sugar levels.
- Once discharged from the hospital, it is extremely important to follow the prescribed diet, to take prescribed medications, and to avoid alcoholic beverages to allow healing of the pancreas.

Sources: National Digestive Diseases Information Clearinghouse. Retrieved August 2005, from <http://digestive.niddk.gov>
The Patient Education Institute. Retrieved August 2005, from <http://www.nlm.nih.gov/medlineplus/tutorials/pancreatitis/htm/index.htm>

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