

CANINE PANCREATITIS

What is pancreatitis?

The pancreas is a vital organ which lies on the right side of the abdomen. It has two functions:

- 1) To produce digestive enzymes to assist in food digestion (fat)
- 2) To produce hormones such as insulin

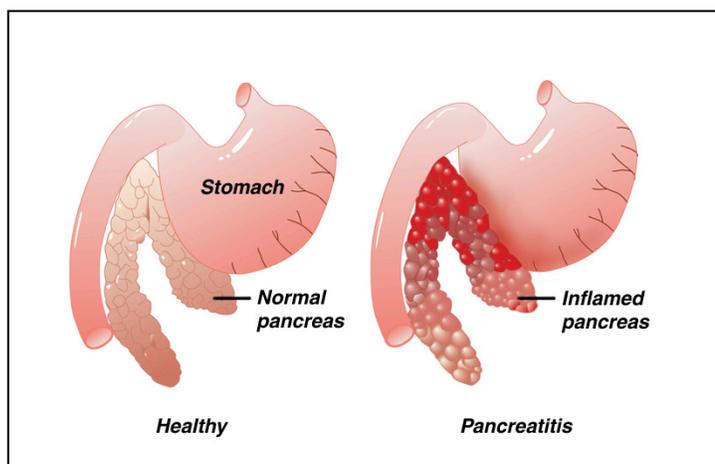
Pancreatitis is an inflammatory disease of the pancreas. It is a disease that is seen commonly in dogs, most often in those that are middle aged, desexed or overweight. There may be a genetic predisposition in some breeds, including Miniature Schnauzers.

There are two main forms of pancreatitis:

- 1) severe, acute/sudden onset
- 2) chronic, low grade

What causes pancreatitis?

Pancreatitis is most often associated with eating a high fat meal. Medications such as steroids, anti-seizure drugs and some chemotherapy agents may predispose to pancreatitis.



Under normal conditions, digestive enzymes produced by the pancreas are activated when they reach the small intestine. In pancreatitis, these enzymes are activated prematurely in the pancreas instead of in the small intestine, resulting in digestion of the pancreas itself. The clinical signs of pancreatitis are often variable, and the intensity of the disease will depend on the quantity of enzymes that are prematurely activated.

What are the clinical signs of pancreatitis?

The most common signs of pancreatitis are vomiting, diarrhoea, lack of appetite and abdominal pain.

Acute pancreatitis is usually sudden in onset and can be very severe. Dogs are very depressed and may go into shock and die if not treated quickly and appropriately

Chronic pancreatitis tends to be an ongoing issue with vague, fluctuating clinical signs. Dogs are most commonly presented when having an acute flare up.

How is pancreatitis diagnosed?

The diagnosis of pancreatitis is based on three criteria: clinical signs, laboratory tests, and/or ultrasound examination.

Laboratory tests usually reveal an elevated white blood cell count and an elevation of pancreatic enzymes in the blood, however some dogs with pancreatitis will have normal results. There may also be an elevation of liver enzymes if concurrent liver damage has occurred. Radiographs and ultrasound studies may show an area of inflammation in the location of the pancreas. The most reliable diagnostic test is the cPLi (canine pancreatic lipase), which is very specific for pancreatitis.

How is pancreatitis treated?

The successful management of pancreatitis will depend on early diagnosis and prompt medical treatment. In severe pancreatitis, delayed treatment may result in complications including abscesses, shock and death.

Treatment includes rehydrating the patient and correcting electrolyte imbalances, providing pain relief and antibiotic therapy. Intravenous fluids are administered while food and water is withheld to rest the pancreas and allow the inflammation to settle down. Most dogs with pancreatitis are hospitalized for two to four days, although it may be longer in severe cases.

Long term, dogs that have suffered from pancreatitis will need to eat a special low fat diet for the rest of their lives. Eating fatty foods will result in another bout of pancreatitis and more long term damage.



Will my dog recover?

The prognosis depends on the extent and severity of the disease when presented and the response to initial therapy. Dogs that present with shock and depression have a very guarded prognosis. Most of the mild forms of pancreatitis have a good prognosis.

Will there be any long-term problems?

There are three possible long-term complications that may follow severe or chronic pancreatitis. If a significant number of cells that produce digestive enzymes are destroyed, a lack of proper food digestion may follow. This is known as exocrine pancreatic insufficiency (EPI) and can be treated

with daily administration of enzyme replacement. If a significant number of cells that produce insulin are destroyed, diabetes mellitus can result. Diabetes will need to be treated with daily insulin injections and regular blood testing/monitoring long term. In rare cases, abscesses and adhesions between the abdominal organs may occur.