



**DANADA VETERINARY HOSPITAL, P.C.**

## **Pancreatitis In Dogs**

The pancreas is a vital organ that lies on the right side of the abdomen. It has two functions: 1) to produce enzymes which help in digestion of food and, 2) to produce hormones, such as insulin. When the pancreas becomes inflamed, the disorder is called pancreatitis. It is a disease process that is seen commonly in dogs. There is no age, sex, or breed predisposition.

There are two main forms of acute (sudden onset) pancreatitis: 1) the mild, edematous form and 2) the more severe, hemorrhagic form. A few dogs that recover from an acute episode of pancreatitis may continue to have recurrent bouts of the acute disease, known as chronic, relapsing pancreatitis. The associated inflammation allows digestive enzymes to spill into the abdominal cavity; this may result in secondary damage to surrounding organs, such as the liver, bile ducts, gall bladder, and intestines.

### ***Causes***

The cause of pancreatitis is not known; however, there may be several contributory factors. It is often associated with a rich, fatty meal. In some cases, it may be associated with the administration of cortisone; however, most dogs with pancreatitis do not have exposure to it.

Under normal conditions, digestive enzymes produced by the pancreas are activated when they reach the small intestines. In pancreatitis, these enzymes are activated prematurely in the pancreas instead of in the small intestines. This results 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.

### ***Clinical Signs***

The diagnosis of pancreatitis is based on three criteria: clinical signs, laboratory tests, and radiographs (x-rays) and/or ultrasound examination. The disease is typically manifested by nausea, vomiting, fever, abdominal pain, and diarrhea. If the attack is severe, acute shock, depression, and death may occur. Laboratory tests usually reveal an elevated white blood cell count and elevation in a pancreatic test known as spec CPL or FPL. More severe cases may have changes in other blood chemistries, as well. Radiographs and ultrasound studies may show an area of inflammation in the location of the pancreas.

### ***Treatment***

Traditionally, there has been no specific treatment for pancreatitis. The successful management of pancreatitis has depended on early diagnosis and prompt supportive medical therapy. The mild form of the disease is best treated by resting the pancreas from its role in digestion. A steady diet, low in fat, is

beneficial. Additionally, medications to treat vomiting and diarrhea are started as needed. Pain management and stomach protectants are used to keep the GI tract settled. In severe cases IV fluids, electrolytes, and injectable medications such as anti-emetics, pain medications, vitamins, and appetite stimulants may be necessary. In some cases, a feeding tube may be placed until the patient is willing and able to eat on their own.

In 2022, a conditionally approved medication called Panoquell was released. This exciting new drug helps to reduce inflammation of the pancreas, speed recovery and lessen severity of the disease. It represents the first true anti-pancreatitis medication in the veterinary field.

### ***Prognosis***

The prognosis depends on the extent of the disease when presented and a favorable 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.

### ***Long-term Problems***

There are three possible long-term complications that may follow severe or repeated 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 pancreatic insufficiency and can be treated with daily administration of enzyme tablets or powder in the food. If a significant number of cells that produce insulin are destroyed, diabetes mellitus can result, and insulin therapy may be needed. In rare cases, adhesions between the abdominal organs may occur because of pancreatitis. However, most dogs recover with no long-term effects.