



Pancreatitis in dogs

What is the pancreas?

The pancreas is an organ in the abdomen that sits close to the stomach and liver. It produces strong digestive enzymes and stores them in protective capsules. When the dog eats, the pancreas releases these enzymes down a narrow tube (the pancreatic duct) into the intestines, where they dissolve and digest the food.

Other parts of the pancreas are responsible for producing insulin and controlling blood sugar levels.

What is pancreatitis?

Pancreatitis occurs when the pancreas becomes inflamed (irritated, tender and swollen). The powerful digestive enzymes leak out of their protective capsules and begin to digest the pancreas itself, and the other nearby tissues.

What causes pancreatitis?

In most cases there is no obvious cause and pancreatitis occur for no apparent reason. However, pancreatitis is most likely to affect middle aged, or older dogs or dogs that have eaten unusual foods (especially fatty foods). Spaniels and terriers appear to be at increased risk.

What are the signs of pancreatitis?

Pancreatitis can cause some or all of the following signs:

- Loss of appetite
- Abdominal pain (shown as depression, whining, restlessness or stretching of the abdomen)
- Vomiting
- Diarrhoea
- Lethargy

Pancreatitis can range from a relatively mild illness (slightly reduced appetite and activity) to moderate illness (vomiting, not eating) to very severe illness (collapse).

It can also be an acute illness (this means that it comes on suddenly and lasts for a few days) or can present as a chronic illness (this means that the symptoms come and go over a much longer period and recurrences are likely even after the dog appears to have recovered).

How is pancreatitis diagnosed?

Many other diseases cause the same symptoms as pancreatitis, so although veterinary examination might raise the suspicion of pancreatitis (particularly if there is pain in the front part of the abdomen), further testing is required to make a diagnosis.

General tests may include routine blood tests to check red and white blood cell counts, liver and kidney function, and sugar, salt and protein levels. An abdominal Xray may be performed to check for ingested foreign objects, and an ultrasound examination allows the pancreas, stomach, liver, spleen, intestines and bladder to be checked for abnormalities. If pancreatitis seems likely, a special blood test (the pancreatic lipase test) can be performed - this test may not detect cases of chronic pancreatitis that have been coming and going for many weeks, but it is very useful for acute cases.

How is pancreatitis treated?

Unfortunately, there is no specific treatment that stops the inflammation in the pancreas and halts the leakage of the digestive enzymes.

Fortunately, the inflammation should eventually settle down on its own and the enzymes will stop leaking out into the surrounding tissues.

This means that the treatment that we give dogs with pancreatitis is all supportive - designed to treat the consequences of pancreatitis and keep the dog safe and comfortable whilst we wait for the pancreas to settle down on its own.

Supportive treatments include:

- Pain relief (usually opioids such as methadone, buprenorphine, tramadol; and/or paracetamol-based medications - not anti-inflammatory painkillers such as meloxicam and carprofen which can make the situation worse)
- Anti-sickness medication (e.g. maropitant, metoclopramide)
- Ant-acid medication (e.g. ranitidine, omeprazole)
- Antibiotics (in some cases)
- Intravenous fluids

Mild cases may be suitable for management at home, with oral medication. More severe cases will need to be hospitalised to be given injectable medications and intravenous fluids. In very severe cases, surgery may be recommended to rule out other diseases, check for abscesses on the pancreas, flush the abdomen with warm saline to dilute the inflammatory chemicals released by the pancreas, and to place a feeding tube. In very occasional cases, the pancreatic duct may become blocked and require surgery to open it with a stent. Fortunately, it is very rare for dogs to require this type of surgery.

Outcome

Most patients make a complete recovery, provided that they are supported appropriately with veterinary and nursing care.

In very rare cases, pancreatitis can be so severe as to be a life-threatening disease.

In some instances, dogs can suffer repeated bouts of the condition (chronic pancreatitis). These dogs are often fairly mildly affected, but the condition is frustrating as it comes and goes without warning and outside of our control. In very rare cases, repeated bouts of severe pancreatitis can lead to diabetes, by damaging the parts of the pancreas that produce insulin. Chronic pancreatitis is common, but it is not at all common to see diabetes develop as a result.

What can we do to prevent pancreatitis from occurring?

As most cases of pancreatitis occur for no known reason, we do not have a good method of preventing pancreatitis.

It is sensible to make sure that dogs are not overweight, and to avoid high fat diets (suitable low fat diets include Chappie and Hills i/d - low fat version). Splitting the food ration into two or three meals per day is best. Some dogs may have inflammatory bowel disease in addition to pancreatitis, and will do best on the prescription hydrolysed diets recommended for inflammatory bowel disease.

Dogs with chronic pancreatitis that are prone to low grade signs such as restlessness, lethargy and reduced appetite should have pain relief and antacid/ anti-sickness medication at home to use whenever a flare-up occurs.

Historically, it has been suggested that feeding a pancreatic enzyme supplement could reduce the risk of pancreatitis reoccurring. However, scientific studies have not found this to be of benefit.

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