

# Pancreatitis

## ABOUT THE DIAGNOSIS

In dogs and cats, as in humans, the pancreas is an organ in the abdomen (belly) that produces substances that are critical for digestion and for the body's normal metabolism. Microscopically, the pancreatic tissue is composed of two parts: *exocrine* and *endocrine*. Exocrine pancreatic tissue is responsible for producing and releasing enzymes (digestive juices) that help to break down and digest food in the intestine. Appropriate digestion permits nutrients to be absorbed and used by the body, and in this way, the pancreas is essential for transforming food into energy and building blocks that the body can use. The endocrine pancreatic tissue is not involved in digestion, but it is just as indispensable to life: it produces hormones such as insulin that circulate in the bloodstream and are necessary for vital processes like blood sugar (glucose) control.

**Cause:** Acute pancreatitis is a sudden onset of inflammation within the pancreas. The exact trigger is often difficult to pinpoint in most dogs and cats. With acute pancreatitis, the enzymes that are normally produced and released to digest food begin to damage the pancreas itself. A variety of symptoms may result. These can range from mild signs of indigestion such as vomiting and loss of appetite, to symptoms of lethargy, painful abdomen, loss of appetite, vomiting, respiratory difficulty, and even collapse and life-threatening shock. Diabetes mellitus (sugar diabetes) occasionally occurs as a result of pancreatitis.

**Dogs:** Acute pancreatitis can develop in any dog; however, most affected dogs are overweight and middle-aged or older. It is thought that a high-fat diet plays an important role in allowing pancreatitis to occur. There is a higher occurrence of this disease in miniature Schnauzers, suggesting that this breed may be genetically predisposed to pancreatitis. Some medications (such as potassium bromide, phenobarbital, L-asparaginase, azathioprine, and sulfa-type antibiotics) have been suspected to contribute to pancreatitis in dogs and probably should not be used in a dog that is known to have, or has had, pancreatitis.

**Cats:** The symptoms are more subtle in cats, so acute pancreatitis is less commonly recognized in this species. However, the effects can be just as severe in cats as in dogs. As in dogs, the initiating factor in causing pancreatitis is usually unknown in cats. In rare cases, some infectious diseases and some medications can cause acute pancreatitis in cats. In many cases, other disorders such as inflammatory bowel disease and chronic liver disease are present concurrently and may be contributing to symptoms more than pancreatitis.

**Diagnosis:** Many disorders can mimic the symptoms of acute pancreatitis. Therefore several tests may be required to eliminate some of these other possibilities in order to determine that pancreatitis is responsible for symptoms. Your veterinarian will start by asking you for a complete medical history for your pet (including inquiring about the duration and exact appearance of symptoms, current and past medications, and type and amount of foods and treats given daily) and will perform a complete physical examination. The most reliable blood test, specPLI, is useful but both false negative and false positive test results occur. An inconsistent result may prompt further testing. In all patients, routine blood and urine tests, including a complete blood count (CBC), serum biochemistry panel, and urinalysis, can help to determine the degree of inflammation and dehydration in the body and to look for other causes of the same symptoms as pancreatitis, since kidney problems,

liver problems, and many other diseases can mimic pancreatitis. Similarly, abdominal x-rays help identify or rule out some problems with the intestinal tract and tumors in the abdomen that could produce similar symptoms. Ultrasound exam of the abdomen is extremely valuable for helping to identify specific changes in the appearance of the pancreas expected with pancreatitis, and for identifying contributing or concurrent disorders.

## LIVING WITH THE DIAGNOSIS

No medication exists that cures pancreatitis, but most dogs and cats will improve on their own with supportive medications and nursing care. Treatment is centered on medications and treatments that allow the pancreas time to heal itself, reduce the likelihood of further pancreatitis being triggered, treat any complications that the pancreatitis can cause, and support vital functions (e.g., nutrition). The extent of supportive care can vary widely from minimal or at-home care to intensive, in-hospital, round-the-clock medical care, depending on the severity of illness.

If medication has been prescribed, you should give it exactly as directed. Even when your pet's condition has improved or resolved completely, pancreatitis may possibly be triggered again in the future by inappropriate food. Therefore, it is important to feed only diets that are of an appropriate composition and nutrient profile for patients with a history of pancreatitis. Your veterinarian can help you determine which is the best type of food. If weight loss is recommended to help prevent recurrence once your pet has recovered, ensure that your dog or cat follows the diet and exercise regimen prescribed.

It is important to note that when cats that eat less than normal or stop eating altogether for any reason, including having pancreatitis, they are at risk for developing a serious liver disease called hepatic lipidosis. Monitor your cat's food intake closely, and notify your veterinarian if your cat has not eaten for 24 hours, even if symptoms of illness are not apparent yet.

## TREATMENT

Usually, we do not find the trigger for pancreatitis but if one is found, it should be addressed (for example, drugs that can trigger the disorder should be discontinued. If the pet is more than mildly dehydrated, intravenous fluids are given in the hospital. Your veterinarian may withhold food for 12-24 hours if vomiting is a problem. Medication to control abdominal pain (analgesic) and anti-nausea medications are given as necessary. If vomiting does not subside, a specially-prepared liquid diet may be given through an intravenous line (parenteral feeding). If vomiting is controlled but your pet refuses to eat, placement of a feeding tube may be necessary.

When a dog or cat with pancreatitis has not vomited for a specified length of time (usually approximately 12-24 hours), a very small amount of water and a low-fat food is offered. If the dog or cat eats and vomiting does not recur, the amount is gradually increased during the next several days. If vomiting returns at any time, food and water often are once again restricted. Since many disorders can cause symptoms that look like pancreatitis (but are a different disease altogether), ongoing vomiting or worsening of symptoms often warrants additional testing. Similarly, during the course of treatment, several diagnostic tests may be repeated to help assess the effectiveness of treatment.

If diabetes mellitus develops, which can occur as a (rare) complication of pancreatitis, insulin is given. Your veterinarian should discuss these events, the treatments, and how they affect the

prognosis with you. With pancreatitis, diabetes may be temporary or permanent.

After your pet recovers, efforts will be made to prevent another bout of pancreatitis. Unfortunately, many pets that develop pancreatitis once will do so again in the future. Keeping your pet at an ideal body weight is helpful. Feeding a low-fat diet (as suggested by your veterinarian) can not only help with weight control, but may reduce risk of recurrence of pancreatitis. Avoiding medications known to cause pancreatitis is also important.

### DOs

- Inform your veterinarian if your cat or dog has ever been diagnosed with a medical condition and is taking medication, because existing medications may alter the treatment plan.
- If pancreatitis is present, give medication exactly as directed by your veterinarian, and if you are concerned about possible negative effects, discuss them with your veterinarian immediately rather than simply discontinuing the treatment.
- Understand the importance of short-term withholding of solid food due to vomiting during pancreatitis. Therefore, during treatment of pancreatitis, food is almost always withheld for 12-24 hours or more, until vomiting has stopped.

### DON'Ts

- Do not postpone visiting your veterinarian if you observe any symptoms of acute pancreatitis (see [Signs to Watch For below](#)) in your dog or cat. Prompt treatment can prevent more severe effects.
- Do not give medication that you have at home that has been prescribed for human use; some of these may interfere with treatment and cause even more severe problems.
- Do not feed large amounts (or even normal amounts) of food during the days following recovery from pancreatitis. The pancreas needs to heal, and this is helped by feeding small, frequent meals that add up to the same daily amount of food, but distributed over several feedings.

### WHEN TO CALL YOUR VETERINARIAN

- If you cannot keep a scheduled appointment
- If you are unable to give medication as directed

- If your pet is not improving after treatment begins, and especially if your pet will not eat

### SIGNS TO WATCH FOR

- Watch for signs of not feeling well, such as a new onset of “low spirits” (mental dullness), weakness, loss of appetite, vomiting, or diarrhea, as possible indicators of worsening rather than improving. A recheck with your veterinarian is warranted if these symptoms arise.

### ROUTINE FOLLOW-UP

- Follow-up appointments are typically scheduled to monitor progress, to determine if treatment should be adjusted, and to pursue any abnormalities on previous blood tests. Since pancreatitis has a very wide degree of variability in its severity, your veterinarian can discuss the frequency and extent of these rechecks with you.

### ADDITIONAL INFORMATION

- Although pancreatitis can be inherited in humans (genetically), this has not yet been proven as a possible cause in dogs and cats.

Practice Stamp or Name & Address

Also available in Spanish.