

# PANCREATITIS

## Pancreatitis- a common condition in dogs and some cats

Pancreatitis is literally inflammation of the pancreas. The pancreas is a very important organ that is located next to the stomach and produces both insulin, a hormone that regulates blood sugar & carbohydrate metabolism, and digestive enzymes, which are substances that break down food in the intestines into nutrients which are then absorbed from the intestine into the blood. Normally, the digestive enzymes are inactive until they are secreted into the intestines, however in pancreatitis, the enzymes become activated in the pancreas and thus start to digest the pancreas itself. Patients suffering pancreatitis become very painful in their abdomens, become anorexic, and repeatedly vomit. If the vomiting is severe, patients become very dehydrated and can go into shock if not treated properly. In most cases, the pancreatitis resolves with supportive care, however, in severe cases, pets can die despite aggressive treatment. Risk factors for the development of pancreatitis include high fat meals, food toxins, repeated vomiting / gastritis from another disease, obesity, and abdominal trauma or surgery. Many times, no inciting cause can be identified

## Symptoms

- Repeated vomiting
- Anorexia (loss of appetite)
- Fever of unknown origin
- Lethargy
- Painful abdomen
- Dehydration
- Shock / collapse

## Diagnosis

- **Physical examination-** the veterinarian will often find non-specific signs including abdominal pain, dehydration, elevated heart and respiratory rates, and fever.
- **Radiographs (X-rays)-** Loss of contrast or blurry appearance in the cranial abdomen (area near the stomach and pancreas due to free fluid in the abdomen) is suggestive of pancreatitis. X-rays are also used to rule out other causes of lethargy and vomiting such as masses (cancer or granulomas- seen with FIP) and intestinal obstructions / foreign bodies.
- **Blood work-** May have mildly elevated white blood cell count, and blood chemistry will often show an elevation in amylase and / or lipase- two markers for pancreatitis. Liver values may be increased as well since the pancreas is right next to the liver in the abdomen.
- **Ultrasound examination** is again is one of the most useful tools used for diagnosis. The ultrasound will show a thickened plump pancreas often surrounded by free fluid caused by a local peritonitis.

## **Treatment**

**Supportive care** includes intravenous fluids, antibiotics, and anti-ulcer medication (Tagamet®, Pepcid® etc) in combination with no food or water given orally for at least 24 – 48 hours, but can be more than 5 days in severe cases. The goal is to completely rest the stomach and pancreas by eliminating all stimuli so that the pancreas can heal itself. Water and a bland diet is gradually re-introduced over several days.

## **Prognosis**

Fair to good depending on the severity of the lesions and the duration before treatment is initiated. Generally dogs with mild to moderate pancreatitis recover in 2-4 days with aggressive therapy.

In very severe cases of pancreatitis, it may take over 7 days for dogs to sufficiently recover, however, even with aggressive care, a small percentage of dogs develop DIC or multiple organ failure leading to death.