Pancreatitis
Cats are not small dogs

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Pancreatitis, an inflammatory condition of the exocrine pancreas, is a multifactorial disease in dogs and cats with a variable clinical course and outcome.

Clinical presentation
Acute pancreatitis has been recognized as a relatively common disease in dogs that present with vomiting, anorexia and abdominal pain. However, feline pancreatitis is more common than many practitioners realize. The diagnosis of this elusive disease remains challenging because the most common clinical signs are vague and nonspecific. Cats typically present with a history of lethargy, decreased appetite, dehydration and weight loss.

Acute versus chronic pancreatitis
Although clinically acute pancreatitis is more commonly recognized in dogs and chronic pancreatitis has been believed to be more common in cats, results of two recent studies found evidence of chronic inflammation on histopathology to be roughly 60% in both dogs and cats.\(^1,2\)

Diagnostic testing
The diagnosis of pancreatitis in dogs and cats should be based upon clinical suspicion, appropriate physical examination findings and supportive laboratory and diagnostic imaging findings. In both species, clinicopathologic findings are nonspecific. Concurrent illnesses, common in the cat, may further confuse interpretation of laboratory results. The canine pancreas-specific lipase assays (Spec cPL\(^®\) and SNAP\(^®\) cPL\(^™\) tests) have recently contributed to practitioners' ability to diagnose pancreatitis more readily. The feline pancreas-specific lipase assay (Spec fPL\(^™\) Test) will provide veterinarians with an invaluable tool to assist in the diagnosis of pancreatitis in cats.

Treatment
In both dogs and cats, treatment of pancreatitis remains primarily supportive because a specific cause is rarely identified. Management of concurrent diseases is particularly important in cats, whereas dietary therapy is the mainstay of long-term management in dogs. Because of the sensitivity for pancreatic inflammation, the Spec cPL and Spec fPL concentrations can be used for monitoring pancreatitis both during hospitalization to assess reduction in pancreatic inflammation and at follow-up veterinary visits to assess response to management changes (e.g., diet change in dogs) or therapeutic interventions (e.g., corticosteroid therapy in cats).

Prognosis
The prognosis for canine and feline pancreatitis is directly related to the severity of the disease. Patients with mild chronic pancreatitis may do well long-term, but may also develop intermittent episodes of severe disease. Patients with acute, severe disease, especially if systemic complications are present, have a poor prognosis. Pancreatitis may complicate management of concurrent diseases in cats, such as diabetes mellitus. In addition, cats with concurrent pancreatitis and hepatic lipidosis have a poorer prognosis than cats with hepatic lipidosis alone. | dx |

REFERENCES
## Comparison of Pancreatitis in Dogs and Cats

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<th>CANINE</th>
<th>FELINE</th>
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| **Classic Signalment** | **Age:** Middle-aged to older  
**Sex:** Male or Female  
**Breeds predisposed:** Schnauzers, Yorkshire terriers, poodles | **Age:** Middle-aged to older  
**Sex:** Male or Female  
**Breeds predisposed:** Possibly Siamese |
| **Weight**           | Often obese                                                            | Often underweight or history of weight loss                            |
| **Prevalence**       | 1.0% of 9,342 dogs on necropsy¹  
>90% of cases undiagnosed (results on recent necropsy study)¹ | 0.6% of 6,504 cats on necropsy¹  
67% of cats presented for necropsy (45% of healthy cats)² |
| **Risk Factors**     | **Drugs:** Potassium bromide, azathioprine, furosemide, tetracycline, aspirin, sulfa drugs, L-Asparaginase, zinc toxicosis  
**Diet:** High-fat foods; dietary indiscretion | **Drugs:** Organophosphates  
**Infectious causes:** Toxoplasma gondii, pancreatic fluke (Eurytrema procyonis), liver fluke (Amphimerus pseudofelineus); Viral–FIP  
**Rehydration, pancreas perfusion, correct electrolyte and acid-base imbalances**  
**Fluids & electrolytes:** Rehydration, pancreas perfusion, correct electrolyte and acid-base imbalances  
**Analgesics:** Routinely administer  
**Antimetics:** Control vomiting to allow nutritional support  
**Antacids:** If evidence of gastrointestinal bleeding  
**Antibiotics:** Rarely indicated  
**Plasma:** Provide clotting factors, antiproteases, α-macroglobulins  
**Colloids:** Improve oncotic pressure to enhance pancreatic perfusion  |
| **Common Concurrent Diseases** | Familial hyperlipidemia in miniature schnauzers | Hepatic Lipidosis  
**Cholangiohepatitis**  
**Diabetes mellitus** |
| **Clinical Signs**   | **Anorexia**  
**Vomiting**  
**Weakness**  
**Abdominal pain**  
**Dehydration**  
**Diarrhea** | **Lethargy**  
**Anorexia/decreased appetite**  
**Dehydration**  
**Weight loss**  
**Icterus** |
| **CBC**              | Thrombocytopenia  
**Neutrophilia with left shift**  
**Anemia** | Nonregenerative anemia  
**Leukocytosis**  
**Leukopenia** |
| **Chemistry Profile** | Increased liver enzymes  
**Azotemia**  
**Electrolyte imbalances**  
**Hyperbilirubinemia**  
**Hypoalbuminemia** | Increased liver enzymes  
**Hyperbilirubinemia**  
**Hyperglycemia**  
**Azotemia**  
**Electrolyte imbalances**  
**Hypocalcemia** |
| **Amylase and Lipase** | 55% sensitive³  
Specific if 2–3 times above the upper limit of the reference interval  
Trending increases utility | Not shown to be useful⁴ |
| **Radiographs**      | Nonspecific  
Identify obstruction, radiodense foreign bodies, etc. | Nonspecific  
Identify obstruction, identify radiodense and suspect linear foreign bodies, etc. |
| **Abdominal Ultrasound** | Up to 68% sensitive⁵  
High specificity with experienced ultrasonographer | 24-67% sensitive⁶  
73% specific⁷ |
| **TLI**              | 33% sensitive⁸  
65% specific⁹ | 28% sensitive⁹  
75% specific⁹ |
| **Pancreas-Specific Lipases Spec cPL/SNAP cPl Spec lPL** | 82% sensitive¹⁰  
>95% specific¹¹¹² | 67% overall sensitive⁹  
54% in mild cases  
100% in severe cases |
| **Treatment**        | **Fluids & Electrolytes:** Rehydration, pancreas perfusion, correct electrolyte and acid-base imbalances  
**Analgesics:** Routinely administer  
**Antimetics:** Control vomiting to allow nutritional support  
**Nutritional support:** NPO no longer recommended; low-fat food per os or via feeding tube  
**Plasma:** Provide clotting factors, antiproteases, α-macroglobulins  
**Colloids:** Improve oncotic pressure to enhance pancreatic perfusion | **Fluids & Electrolytes:** Rehydration, pancreas perfusion, correct electrolyte and acid-base imbalances  
**Analgesics:** Routinely administer  
**Antimetics:** Control vomiting to allow nutritional support  
**Nutritional support:** NPO not recommended; fat content not important; feeding tube usually required  
**Plasma:** Provide clotting factors, antiproteases, α-macroglobulins  
**Colloids:** Improve oncotic pressure to enhance pancreatic perfusion  
**Antacids:** If evidence of gastrointestinal bleeding  
**Antibiotics:** Rarely indicated  
**Cobalamin (vitamin B₁₂):** Deficiency common with concurrent gastrointestinal disease  
**Glucocorticoids:** Believed to be beneficial especially in chronic disease; not contraindicated to treat concurrent disorders  
**Appetite stimulants**  
**Treat concurrent diseases** (e.g., insulin for diabetes) |

¹Listed in order from most to least frequent findings. For canine clinical signs, see reference 4. For feline clinical signs, see reference 5.