

COURSE SHEET: PANCREATITIS

DEFINITION

Pancreatitis is an inflammation of the pancreas that can be acute or chronic. It leads to autodigestion of pancreatic tissue by digestive enzymes, causing varying degrees of damage. This condition is common in domestic carnivores such as dogs and cats



EPIDEMIOLOGY

- **Risk factors:** high-fat diet, obesity, endocrine diseases (diabetes mellitus, Cushing's syndrome), hyperlipidemia, predisposed breeds (Miniature Schnauzer, Yorkshire Terrier).
- **More common in small-breed dogs and older cats.**
- **Can be idiopathic or secondary to infections, medications (corticosteroids, diuretics, azathioprine), or trauma.**



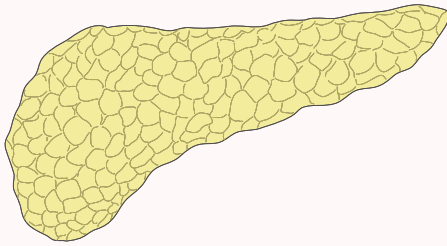
CLINICAL SIGNS

- **Vomiting, anorexia, abdominal pain (prayer position in dogs)**
- **Lethargy, dehydration, diarrhea**
- **Fever, jaundice in severe cases**
- **Progressive weight loss in chronic cases**



PATHOGENESIS

- **Premature activation of digestive enzymes (trypsin, lipase, amylase) within the pancreas.**
- **Auto-digestion of pancreatic tissue leading to local inflammatory response.**
- **Recruitment of neutrophils and release of inflammatory cytokines (IL-1, TNF- α), potentially leading to systemic inflammation.**
- **In severe cases, progression to pancreatic necrosis, vascular damage, and multi-organ failure.**



DIAGNOSTIC TESTS

- **Blood analysis:** increased pancreatic enzymes (specific pancreatic lipase, amylase, TLI), elevated inflammatory markers (CRP, leukocytosis)
- **Abdominal ultrasound:** enlarged pancreas, altered echogenicity, presence of abdominal effusion
- **Pancreatic biopsy:** rarely needed but provides definitive diagnosis
- **CT scan and MRI:** in advanced cases or to differentiate from other abdominal diseases



TREATMENTS



- **Intensive fluid therapy to correct dehydration**
- **Pain management (opioids, NSAIDs with caution)**
- **Early nutrition with low-fat diet, feeding tube if persistent anorexia**
- **Antiemetics (maropitant, metoclopramide), antibiotics if secondary infection suspected**

COMPLICATIONS / PREVENTION

- **Complications:** exocrine pancreatic insufficiency, secondary diabetes mellitus, pancreatic abscess, peritonitis, disseminated intravascular coagulation (DIC)
- **Prevention:** weight control, balanced low-fat diet, avoiding high-fat meals