# BIBLIOGRAPHIC REVIEW ON FELINE TRIADITIS

Final Degree Project - June 2024 Narcís Pérez Hernández



# INTRODUCTION

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Feline triaditis is described as a comorbidity of pancreatitis, cholangitis and enteritis. Despite its frequency, studies on its etiopathogenesis, diagnosis and treatment are still lacking.

### **OBJECTIVES**

- Conduct a bibliographic review on feline triaditis.
- Elaborate a description of the etiopathogenesis and basic histologic features of pancreatitis, cholangitis and enteritis.
- Discuss the anatomy of the cat influential in this disease.

# BIBLIOGRAPHIC REVIEW CLINICAL SIGNS

Combination of nonspecific signs observed in pancreatitis, cholangitis and enteritis: anorexia, weight loss, muscle wasting, diarrhea, vomiting, jaundice, abdominal pain, pyrexia, hypothermia, tachypnea, dyspnea and shock.

#### **DIAGNOSIS**

Table 1. Diagnostic testing options for feline triaditis.

Diagnostic Test	Pancreatitis	Cholangitis	Enteritis
Laboratory tests (CBC and biochemistry)	The clinical findings on feline triaditis are similar to those found in pancreatitis, cholangitis or enteritis. Most of the time anemia with leukocytosis or leukopenia, altered liver enzymes and hypoalbuminemia		
Specific tests	Elevated feline pancreatic lipase immunoreactivity (Spec fPLI and SNAP fPLI)	Bile acid test, Coagulation time	Low cobalamin +/- low/elevated folate, Haptoglobin serum concentrations, Coprology
Diagnostic imaging	Low sensitivity FNA of pancreas	Low sensitivity FNA of liver and gall bladder	Low sensitivity but useful to rule out other causes of enteritis
Biopsy	Gold standard. Invasive test. Most of the time not realized.		

## CONCLUSIONS

- More studies on the etiopathogenesis of this disease are needed.
- Biopsy samples are the gold standard for diagnosis. The difficulty in collecting them complicates the evaluation of this disease in subsequent studies.

#### **ETIOPATHOGENESIS**

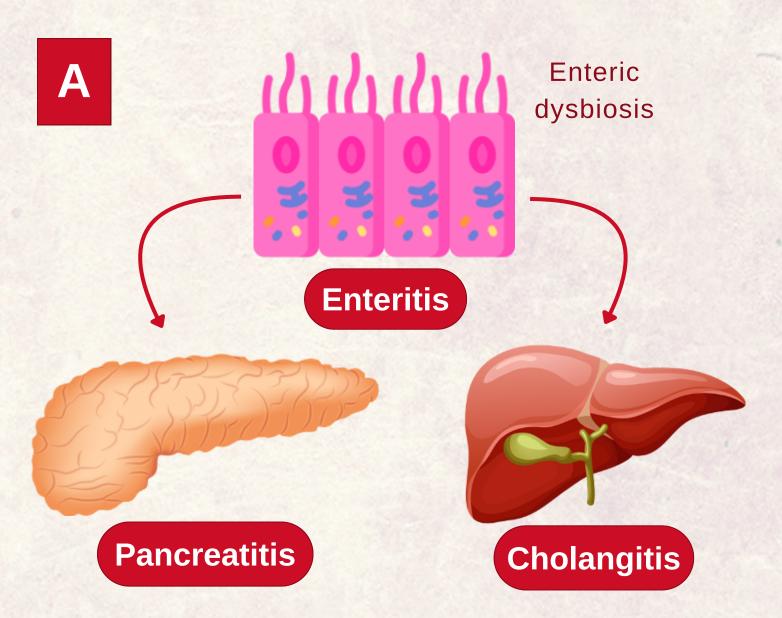


Figure 1. Bacterial ascension from the intestine, due to the junction of the bile duct and pancreatic duct before entering the Major Duodenal Papilla.



Acute Pancreatitis as the primary cause, leading to a systemic inflammatory response by juxtaposition of these organs, with consequent dysbiosis and translocation of bacteria from the intestine.



Inflammatory state due to activation of memory T lymphocytes, with a less likely bacterial component.

#### TREATMENT

Table 2. Treatment options for feline triaditis.

Treatment	Pancreatitis	Cholangitis	Enteritis
Fluid therapy	Important both for maintenance requirements and for restoring losses		
Analgesia (mainly due for pancreatitis)	Buprenorphine 0,005-0,01 mg/kg IV/IM q6-12h Methadone 0,1-0,3 mg/kg IV q4-6h Fentanyl 0,005 mg/kg IV bolus or transdermal patch Neuromodulatory analgesics like gabapentin		
Antiemetics	Maropitant 1 mg/kg SC/IV/PO q24h Ondansetron 0,5-1 mg/kg PO q12-24h		
Nutrition	Very important, naso-esophageal or esophagostomy tube if necessary Mirtazapine 1,9 mg PO q48h or SC q24h Hydrolyzed or antigen-restricted diet important in Lymphoplasmacytic Enteritis		
Antibiotics	If suspicion of bacterial translocation	If suspicion of bacterial translocation or Neutrophilic Cholangitis	If abundant mucosal bacteria (FISH), with tylosin or metronidazole
Immunosuppressive drugs	Prednisolone for Chronic Pancreatitis 1-2 mg/kg PO q24h	Prednisolone for Lymphocytic Cholangitis 1-2 mg/kg PO q12h, Cyclosporine or chlorambucil	Prednisolone for Lymphoplasmacytic Enteritis 1-2 mg/kg PO q12h, Cyclosporine or chlorambucil
Others	Cobalamin if deficient Surgery if EHBO	Ursodiol or antioxidants Vit K if deficient Surgery if EHBO	Cobalamin or folate if deficient