

EXOCRINE PANCREATIC INSUFFICIENCY: IN REFERENCE TO THREE CLINICAL CASES



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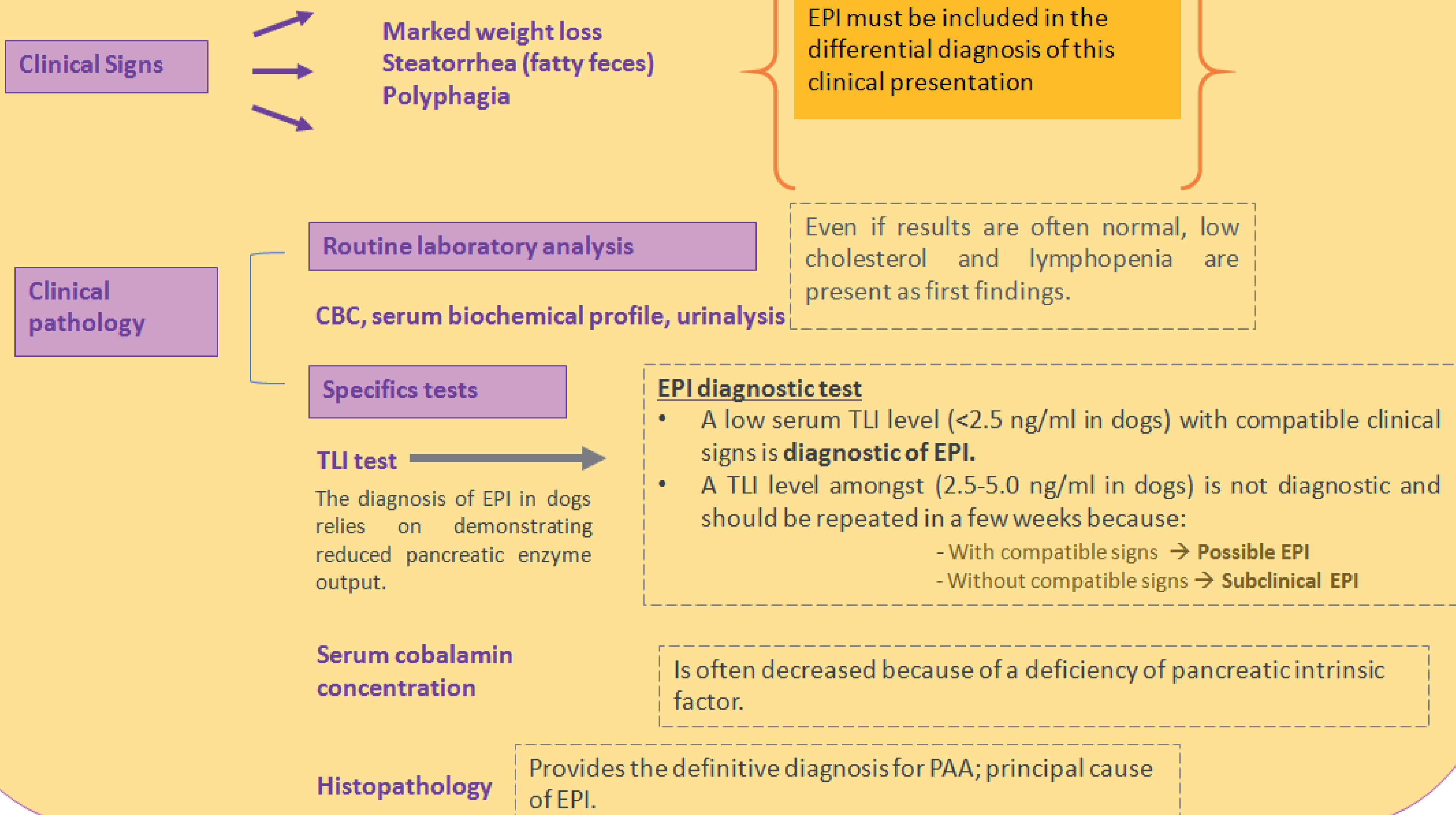
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INTRODUCTION AND OBJECTIVES

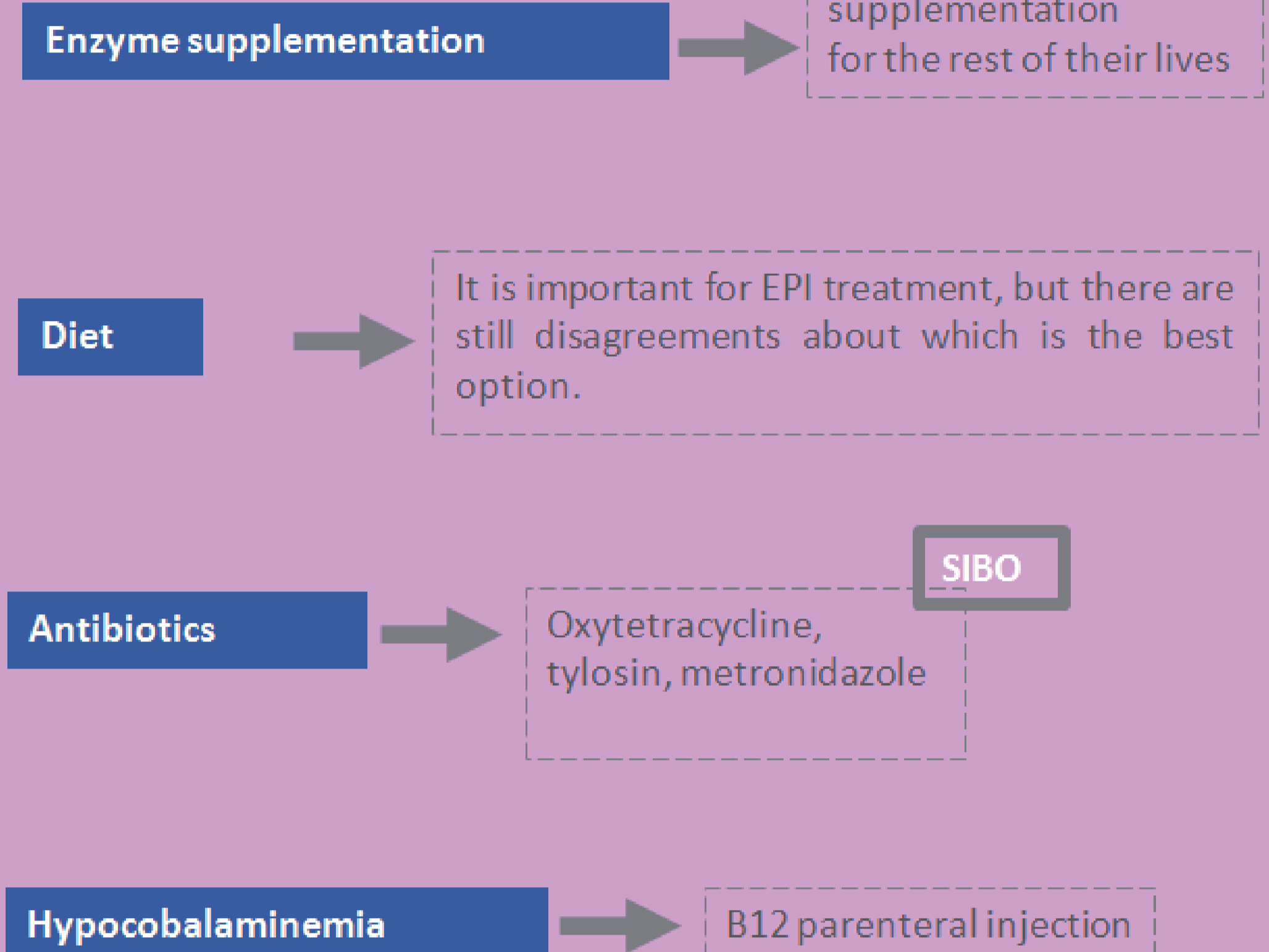
Weight loss is very common amongst dogs, and EPI is one of the causes. Exocrine pancreatic function may be diminished leading to inadequate production of digestive enzymes and classic signs of maldigestion.

The object of this study is to do a review about the different aspects of this disease in dogs, supported by three clinical cases.

DIAGNOSIS



TREATMENT



CASE 1.- TONI

History: 2 years old neutered male mixed breed rescued in a cachectic conditions. **Initial weight: 7,6 kg.**

Physical examination: 1/5 CC, lethargic and signs of malnutrition. Presence of diarrhea, polyphagia and poor coat quality.

Medical procedures:

Complete Blood Count → Hypocolesterolemia, lymphopenia, neutrophilia and leucocitopenia.

Biochemistry → OK

TLI test → 1 ng/ml (< 2,5 ng/ml)

Treatment:

Pancreatic enzymes	Pancreozim → Kreon 10000
Antibiotic	Metronidazole
Diet	Specific digestive support → Specific puppy large and giant → Hill's z/d
Hypocobalaminemia	Parenteral injection B12

Current weight: 13,5 kg



Figure 1 and 2 : Young mixed breed



CASE 2.- ZAIRA

History: 6 years old neutered female mixed breed has had diarrhea and polyphagia since two month. Treated with sulphonamide without improvement. **Initial weight: 3,4 kg.**

Physical examination: 2/5 CC, Dehydration. Presence of poor coat quality, steatorrhea and weight loss.

Medical procedures:

Complete Blood Count → Hypocolesterolemia, lymphopenia, neutrophilia and leucocitopenia.

Biochemistry → OK

TLI test → 1,5 ng/ml (< 2,5 ng/ml)

Treatment:

Pancreatic enzymes	Pancreopharma
Diet	Hill's i/d → Adult diet → Hill's i/d

Current weight: 4,4 kg



Figure 3: Adult mixed breed

CASE 3.- ROSSIE

History: 7 years old neutered female boxer has had marked weight loss, chronic diarrhea and polyphagia. Treated with enrofloxacin, prednisone (10 days) and metronidazole. No signs of improvement. **Initial weight: 19 kg.**

Physical examination: 1/5 CC, lethargic and signs of malnutrition. Presence of diarrhea, polyphagia and poor coat quality.

Medical procedures:

Complete Blood Count → Hypocolesterolemia, lymphopenia, neutrophilia and leucocitopenia.

Biochemistry → OK

TLI test → 5,58 ng/ml (< 2,5 ng/ml)

Histopathology → atrophy with lymphoplasmacytic inflammation still residual acinar tissue fibrosis.

Treatment:

Pancreatic enzymes	Pancreozim
Diet	Hill's z/d

Current weight: 24 kg



Figure 4: Adult Boxer

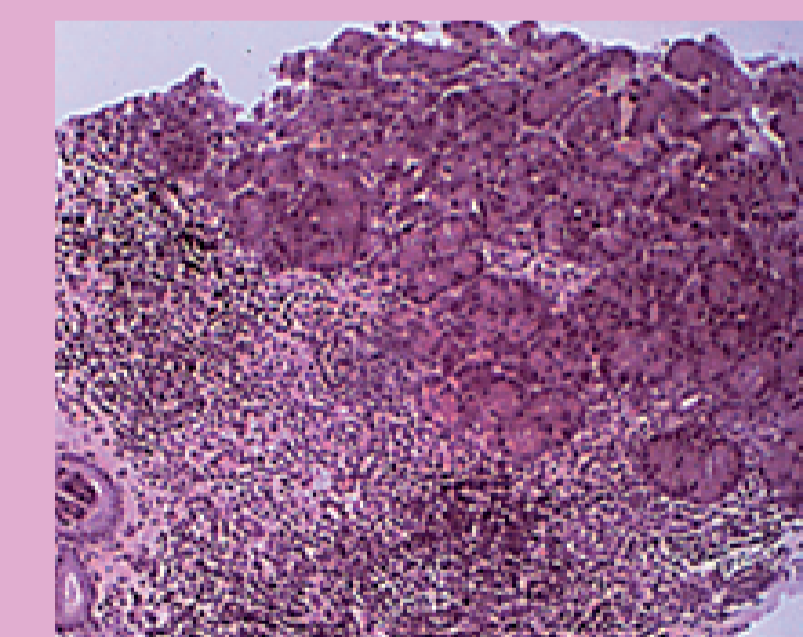


Figure 5. Pancreas of a dog with clinical EPI, showing typical changes of pancreatic acinar atrophy. Note severe atrophied parenchyma consisting of ductal structures and disorganized cells. (Westermarck y Wiberg 2012)

CONCLUSIONS

- The exocrine pancreatic insufficiency causes malnutrition and can be fatal in dogs.
- The clinical presentation is very characteristic: marked weight lost, diarrhea and polyphagia.
- The first analytical finding is a decrease of cholesterol in addition to a subsequent general deterioration.
- Treatment with pancreatic enzymes is essential.
- Diet plays an important role in the treatment of dogs with EPI suggesting a marked interindividual variation.
- The contribution of multiple genes combined with environmental factors may explain observed variability in clinical progression.
- Inheritance and a genetical complex disorder are thought to be the new causes of EPI.