



Gastroenterology

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Chief Complaint

“Tippy ” is a 7 year old spayed female Yorkshire Terrier with a history chronic intermittent diarrhea, weight loss with some vomiting.

Tippy



History

- Chronic diarrhea for last 3 months
- Weight loss
- Vomiting periodically
- Distended abdomen

Physical Examination

- Mild dehydration – 5 %
- Temperature 38.6 degrees C
- HR – 100 BPM RR – 20 breaths /minute
- Weight loss
- Distended abdomen

Problem List

- Weight loss
- Distended abdomen
- Chronic diarrhea

Rule Outs

- List all the Possible Diagnoses
- *This list is your Rule Out list*

Rule Outs

- Intestinal Parasites
- Inflammatory Bowel Disease (IBD)
- Liver failure – cirrhosis
- Heart failure – right heart failure
- Hypoproteinemia – low serum protein.

The Plan

- What is your PLAN ?

Plan

- CBC
- Serum blood chemistry
- Fecal flotation
- Abdominal radiographs

Abdominal Radiograph



CBC/Chemistry/Urinalysis

- Albumin – 1.5 g/dl (2.3-4.0)
- Globulins – 1.8 g/dl (2.5-4.5)
- Cholesterol 85 mg/dl (110-320)
- Calcium – 6.0 mg/dl (7.9-12.0)
- Lymphocytes – 0.23×10^3 (.53-3.44)
- U/A – Normal
- Fecal – Negative for Parasites

Assessment of the Lab Findings

- Assessment of the Lab Findings?
- Evaluate and Interpret the Abdominal Radiograph

Assessment of the Lab Findings

- Hypoalbuminemia
- Hypoglobulinemia
- Hypocholesterolemia
- Hypocalcemia
- Lymphopenia

Assessment of the Radiograph

- Loss of detail due to Ascites

Primary Rule Out

- Give Reasons for you Answer

Rule Outs

- Panhypoproteinemia
 - (low Albumin and low Globulin)

What are the causes of Panhypoproteinemia?

Causes of Hypoalbuminemia

- Protein Losing Enteropathy (intestine)
- Liver Disease
- Protein Losing Nephropathy (kidney)
- Intestinal Parasites

Diagnosis

- What is the most likely diagnosis?
 - Give reasons for your decision

Diagnosis

- Most likely: **Protein Losing Enteropathy**
- Not likely
 - Liver Disease – Liver Enzymes Normal
 - Protein -Losing Nephropathy - No urine protein
 - Intestinal Parasites – Fecal Negative

Diagnosis

- What is the most common cause of Protein-Losing Enteropathy in Yorkshire Terriers?

Diagnosis

- Lymphangiectasia

Confirm your Diagnosis

- How would you confirm your diagnosis?

Confirm the Diagnosis

- Intestinal Biopsy

Treatment

- Low Fat Diet with high quality protein
- Feed MCT (Medium Chain Triglycerides)
- Fat Soluble Vitamins A,D,E,K
- Steroids - decreases intestinal inflammation
- Cobalamin supplement



The End





























































