



Small Animal Internal Medicine 2

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Chief Complaint

Daisy is a 10 year old spayed female cocker spaniel with a chief complaint of periodic vomiting and polyuria/polydipsea

Daisy



History

- Anorexia
- Vomiting – once daily
- Polyuria/polydipsia
- Very lethargic
- Dehydration

Physical Examination

- Very lethargic
- Temperature 40 degrees
- Heart rate 125 bpm
- Respiratory rate 15 per minute
- Jaundice (Icterus)
- 8 % dehydration

Problem List

- Anorexia
- Fever
- PU/PD
- Icterus
- Vomiting
- Lethargic

Rule Outs

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

Rule Outs

- Renal disease
- Liver disease
- Gastrointestinal disease
- Pancreatitis
- Diabetic ketoacidosis

The Plan

- What is your PLAN ?

Plan

- CBC/Chemistry/Urinalysis
- Abdominal radiographs
- Abdominal ultrasound

Laboratory findings

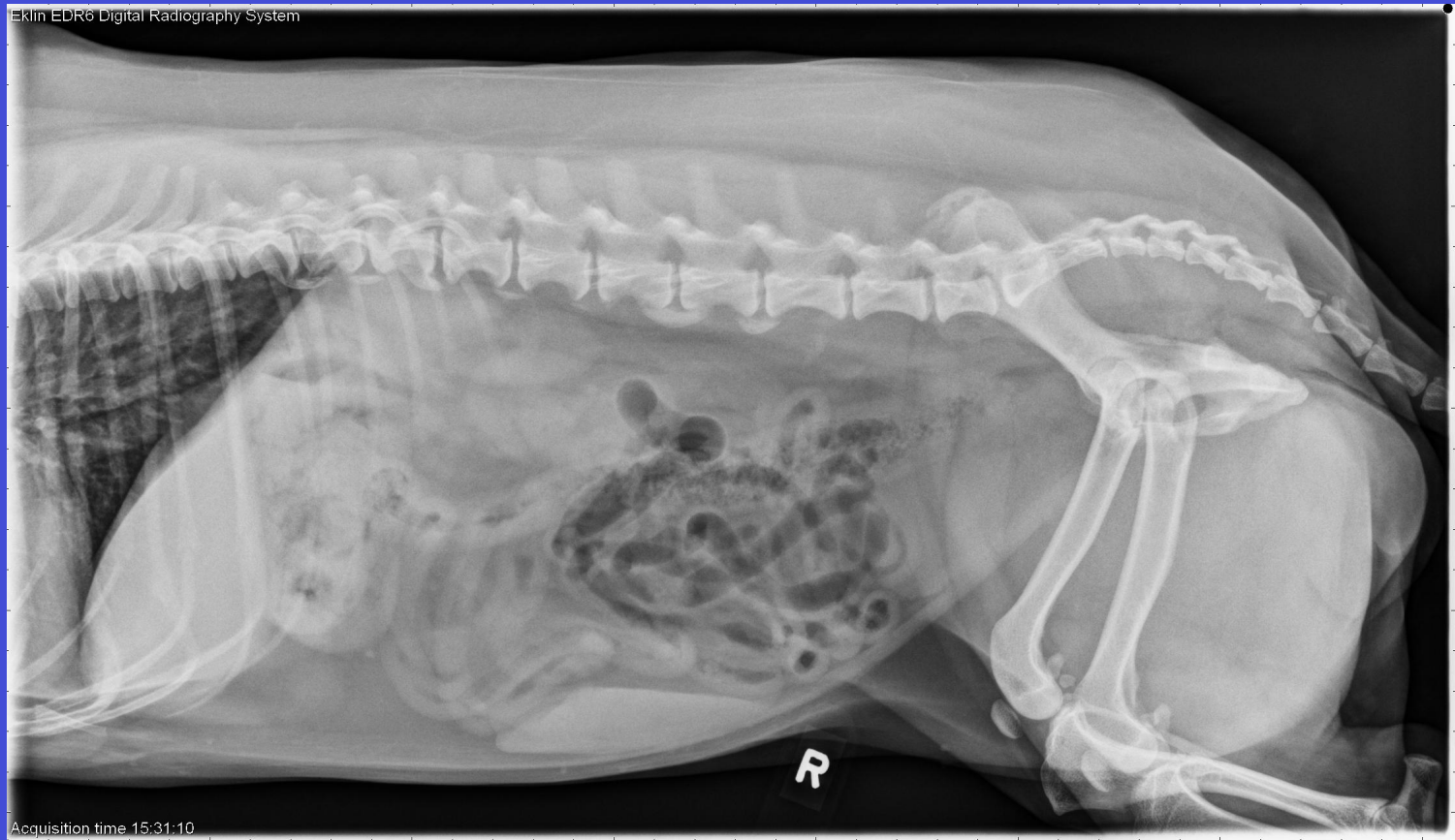
- RBC – 4.5×10^3 (5.5-11.0)
- WBC- 22×10^3 (6-17) Bands - 5×10^3 (0-.3)
- PCV – 60 (37-55)
- Bilirubin 4.0 mg/dl (0.0-0.9)
- ALT – 350 u/l (12-130)
- ALKP – 800 u/l (14-111)
- GGT -2.3u/l (0-1)
- BUN – 60 mg/dl (16-36)
- SCr. – 2.0 mg/dl (0.8-2.4)
- USG – 1.035 (> 1.035)
- Cl – 100 mmol/L (106-127)

Interpret the lab findings

- RBC – 4.5×10^3 (5.5-11.0) – anemia of chronic disease
- WBC- 22×10^3 (6-17) Bands - 5×10^3 (0-.3) - infection
- PCV – 60 (37-55) – dehydration
- Bilirubin 4.0 mg/dl (0.0-0.9) – liver disease or hemolysis
- ALT – 350 u/l (12-130) – liver disease
- ALKP – 800 u/l (14-111) – liver disease – block bile duct
- GGT -2.3u/l (0-1) – liver disease
- BUN – 60 mg/dl (16-36) – prerenal azotemia
- SCr. – 2.0 mg/dl (0.8-2.4) – normal kidney function
- USG – 1.035 (> 1.035) – good concentrating ability
- Cl – 100 mmol/L (106-127 – loss of Cl from vomiting

Radiograph – right lateral

Eklin EDR6 Digital Radiography System



Acquisition time 15:31:10

V/D Abdomen



Radiograph Evaluation

- List all the abnormal radiographic signs that you see on the previous radiographs

Radiographic Lesions

- The abdominal radiographs are normal

Abdominal Ultrasound

what do you see?



Interpretation of U/S

- The gallbladder is filled with amorphous echogenic material with finely striated pattern resembling a sliced kiwi fruit.
- This U/S is a typical picture of a Gallbladder mucocele – “kiwi” fruit image on ultrasound.

What is your Diagnosis?

- Gallbladder Mucocele

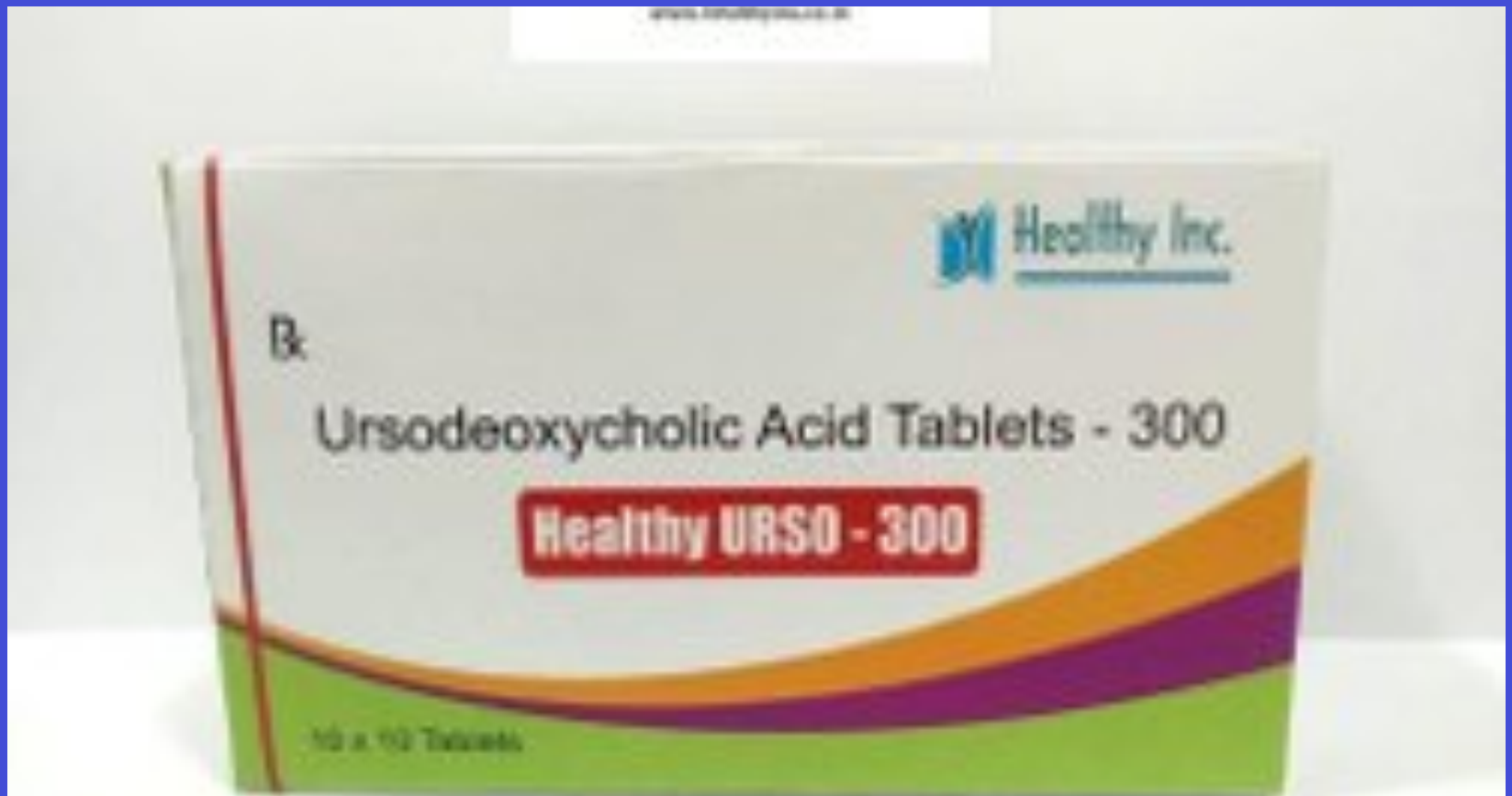
Complication/disease

- What disease can accompany Gallbladder Mucocele?
 - Ruptured gallbladder resulting in peritonitis

Treatment Plan

- IV Fluids
- Antibiotics
- Ursodeoxycholic acid – increases the flow of bile
- S- Adenosylmethionine (SAMe) liver protector – also acts like an antioxidant
- Surgery - removal of the gallbladder (cholecystectomy) is the treatment of choice

Ursodeoxycholic acid



S- Adenosylmethionine (SAMe)



Prognosis

- The perioperative mortality ranges from 22 to 32%
- Rupture of the gallbladder has been shown to worsen the prognosis when infection is present
- Long-term survival of patients that have undergone gallbladder removal is excellent
- Liver enzymes remain elevated in most patients, but these values usually are much lower than the preop state

The End



