

## What's Your Diagnosis?

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### "Cuppa" 7 y/o F/Intact Yellow Labrador Retriever

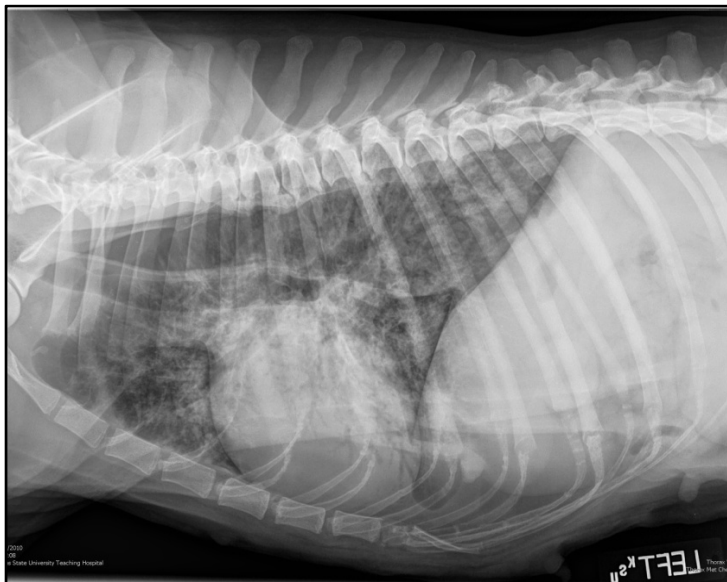
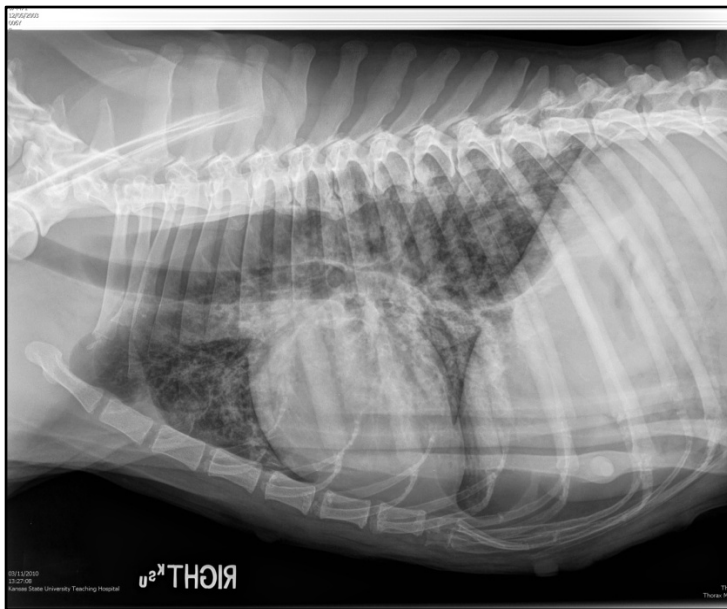
**Presenting Complaint:** Owner noticed decreased appetite and lethargy 2 days before presentation. Dog began vomiting day before presentation with condition worsening as time progressed. Morning of presentation the dog was no longer able to hold her head up while she vomited and was vomiting mostly clear liquid and saliva. The dog was no longer able to stand long enough to pass urine and bowel movements by presentation day and had labored breathing while awake.

**History:** The patient had repeatedly presented for chronic vomiting/regurgitation and intermittent diarrhea for the past 2 months. Diagnosis was made of megaesophagus one month before (02/16/10) via barium study.

- ❖ **Physical Exam:** Left sided facial nerve paralysis, horners syndrome and proprioceptive deficits on left rear leg were diagnosed on presentation. Temperature of 103.1 Fahrenheit, HR of 92 bpm and RR of 48 bpm. Dry crusty nasal discharge at left nostril. 8-10% dehydrated.
- ❖ **CBC** revealed elevated band neutrophil concentration (1.2 K/uL ; reference range 0-0.3 K/uL), low lymphocyte concentration (0.8 K/uL; reference rang 1.5-5 K/uL), elevated monocyte concentration (1.6 K/uL; reference range 0.1-0.8 K/uL)
- ❖ **Biochemical abnormalities** included elevated urea nitrogen (79 mg/dL; reference range of 9-33 mg/dL), elevated creatinine (2.2mg/dL; reference range 0.5-1.5 mg/dL), decreased albumin (2.9 mg/dL; reference range 3.4-4.2 mg/dL), decreased total calcium (9.6 mg/dL; reference range 9.7-12.1 mg/dL), elevated phosphorus (9.3 mg/dL; 9.7-12.1 mg/dL), decreased sodium (146 mmol/L; reference range 147-154 mmol/L), decreased chloride (96 mmol/L; reference range 108-118 mmol/L), elevated anion gap (27 mmol/L; reference range 16-26 mmol/L), elevated alkaline phosphatase (648 U/L; reference range 1-142 U/L), elevated total bilirubin (1.0 mg/dL; reference range 0.1-0.3 mg/dL) and serum demonstrated mild icterus.

### Radiographs:





- ❖ Generalized severe gaseous distension of the esophagus, causing mild ventral displacement of the intra-thoracic trachea
- ❖ Greatly enlarged mainstem bronchi that fail to taper in the periphery
- ❖ Increased size and number of bronchial markings with increased peri-bronchial pulmonary opacity involving all lung lobes
- ❖ Multifocal alveolar pulmonary opacity and air bronchograms involving right cranial and middle lung lobes
- ❖ Spondylosis deformans involving central thoracic spine
- ❖ Degenerative changes associated with joint spaces of the articular facets involving caudal thoracic spine
- ❖ Impressions: Severe gaseous megaesophagus, bronchiectasis/chronic bronchitis and aspiration pneumonia. Multifocal spondylosis deformans and spinal arthrosis.

**Cytology Exam** of lung aspirate of the patient was performed following radiographs and revealed moderate nucleated cellularity, many erythrocytes, and pale backgrounds. Nucleated cells consist of moderately degenerate neutrophils and occasional macrophages, there are also rare clusters of ciliated low-columnar epithelial cells. There are frequency intracellular and extracellular pleomorphic bacilli and cocci. These findings are consistent with septic (bacterial) neutrophilic inflammation.

**Outcome:** Suppurative bronchopneumonia consistent with aspiration pneumonia secondary to megaesophagus was diagnosed.