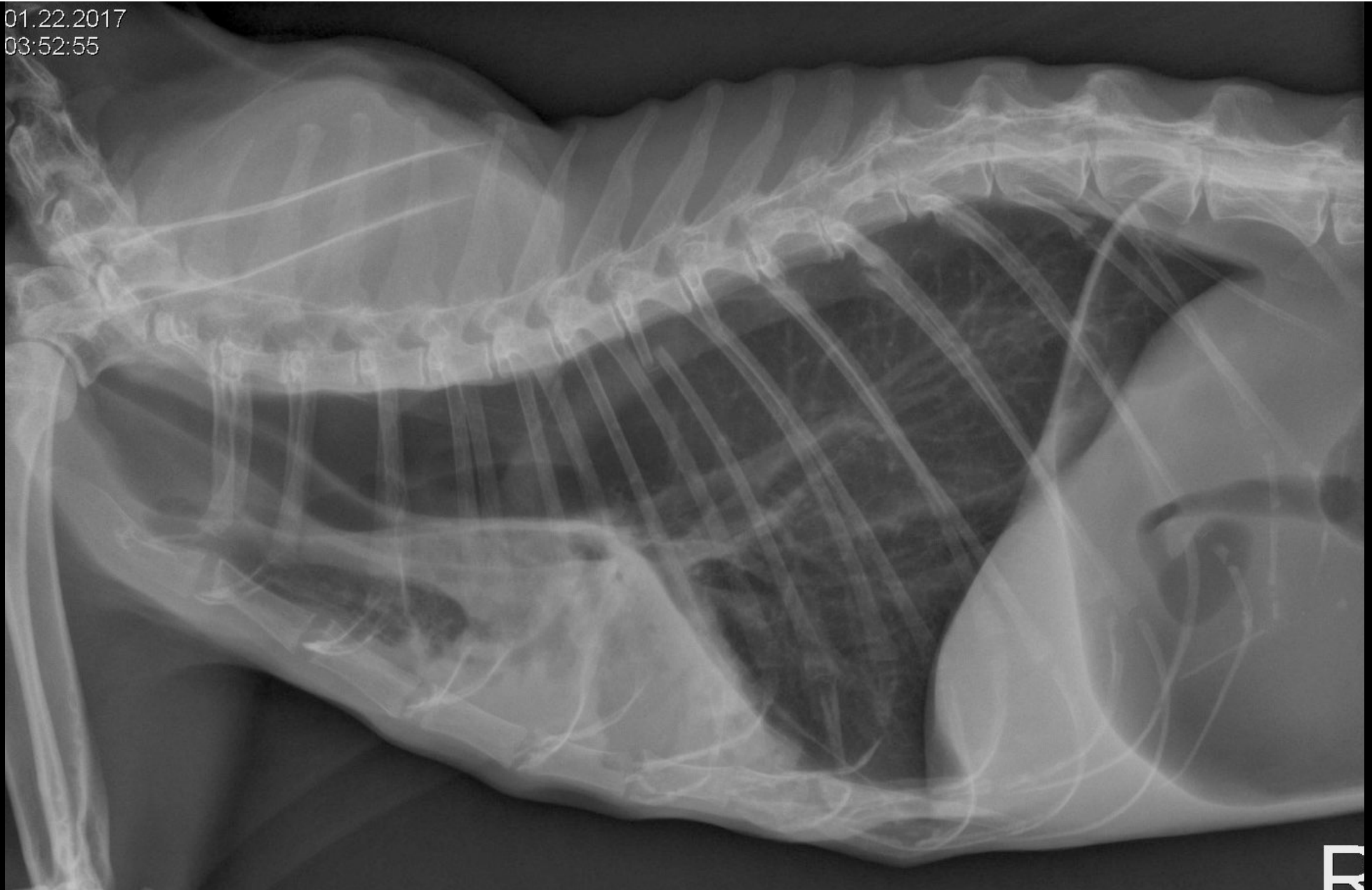


## Little Black, ALH, FS, 16 years

- Recurrent distended abdomen
- Weight loss
- Straining to urinate
- Third eyelid prolapse
- Midriasis
- Dyspneic
- Chronic cough
- Unremarkable blood work



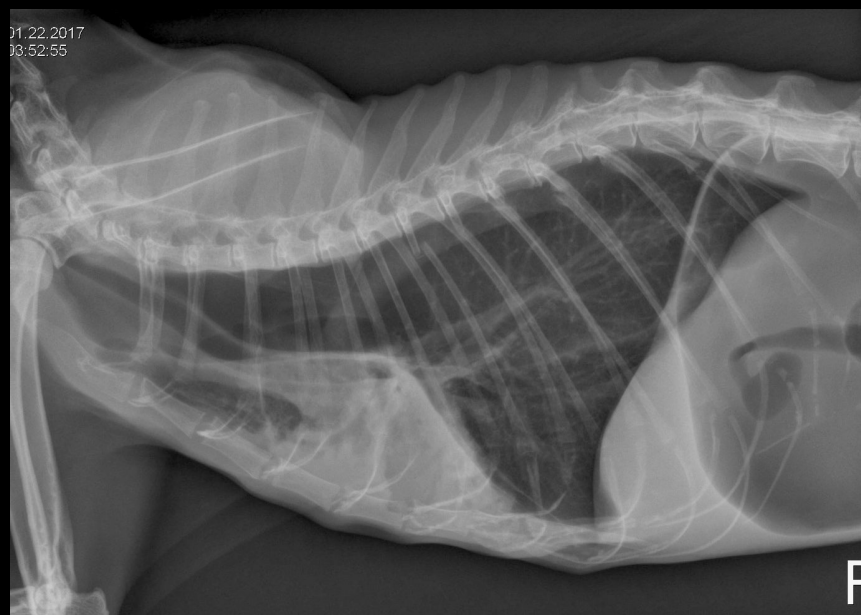
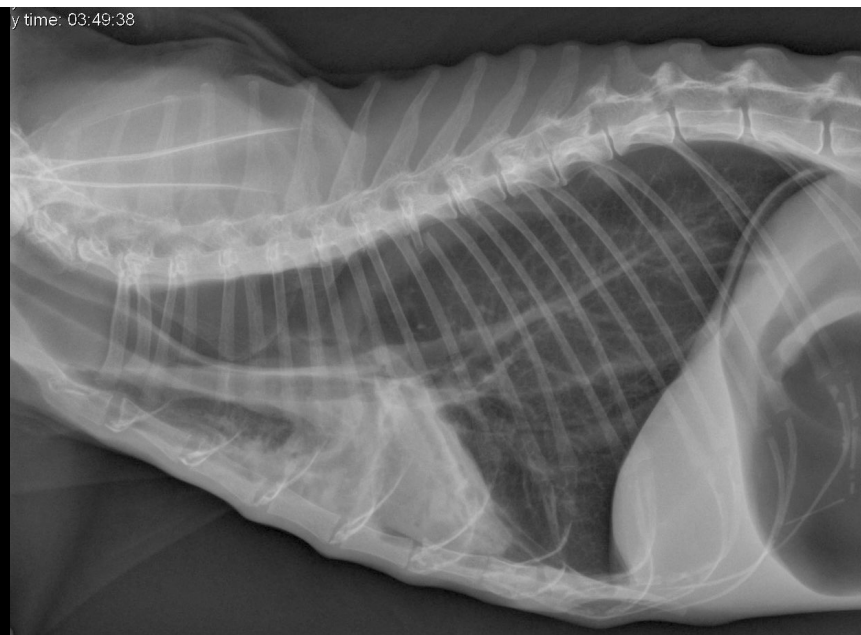
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## DESCRIBE THE RADIOGRAPHIC CHANGES

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

## LIST YOUR RADIOGRAPHIC DIAGNOSIS

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Little Black, ALH, FS, 16 years  
LIST OF RADIOGRAPHIC DIAGNOSIS

- Increased thoracic volume
- Multiple ribs fractures
- Severely dilated esophagus
- Ventral alveolar pattern



## LIST YOUR MOST LIKELY DIFFERENTIAL DIAGNOSES

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



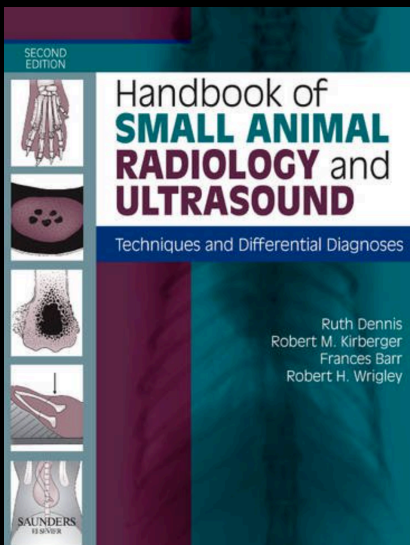
## Generalized oesophageal dilation (Fig. 8.11)

Megaoesophagus results from a motility disorder due to central nervous system disease or neuromuscular disorders. Megaoesophagus is less common in cats than in dogs.

### 1. Transient megaoesophagus.

- a. Heavy sedation or general anaesthesia.
- b. Severe respiratory infections (e.g. acute tracheobronchitis).
- c. Sliding hiatal hernia.
- d. Following repair of ruptured diaphragm.

- a. Vascular ring anomaly (mainly persistent right aortic arch) – results in localized dilation cranial to the constriction, but a small percentage of these cases also have oesophageal dilation caudal to the constriction, resulting in generalized dilation. If air-filled, the constriction may be seen. German Shepherd dog, Labrador and Irish Setter.
- b. Hereditary megaoesophagus – Wirehaired Fox Terrier and Miniature Schnauzer.
- c. Familial predisposition – German Shepherd dog, Great Dane, Newfoundland, Shar Pei and Golden Retriever; Siamese cats.
- d. Congenital myasthenia gravis – Jack Russell Terrier, Springer Spaniel and Smooth-haired Fox Terrier.
- e. Canine glycogen storage disease – young Lapland dogs.
- f. Hereditary myopathy – young Labradors.
- g. Canine giant axonal neuropathy – young German Shepherd dogs.



IN THE CAT A DILATED ESOPHAGUS IS NOT  
A COMMON CONDITION

3. Acquired megaesophagus.

- a. Idiopathic.
- b. Immune-mediated myopathies and neuropathies.
  - Polymyositis – large breeds.
  - Acquired myasthenia gravis; generalized muscle disease or selective oesophageal involvement – may be associated with thymoma.
  - Acute polyradiculoneuritis.
  - Systemic lupus erythematosus.
  - Polyneuritis.
  - Dermatomyositis.
- c. Metabolic neuropathies and myelopathies.
  - Hypoadrenocorticism (Addison's disease) often accompanied by microcardia.
  - Hypothyroidism.
  - Corticosteroid-induced polymyopathy.
  - Diabetes mellitus.
  - Hyperinsulinism.
  - Uraemia.
- d. Toxic neuropathies.
  - Organophosphates.
  - Heavy metals, particularly lead but also zinc, cadmium and thallium.
  - Chlorinated hydrocarbons.
  - Anticholinesterase.
  - Herbicides.
  - Acrylamide.
  - Botulism.
  - Tetanus.

e. Secondary to:

- Reflux oesophagitis, particularly as result of axial oesophageal hiatal hernias (see 8.19.3).
- Distal oesophageal foreign body.
- Acute gastric dilation and volvulus syndrome.
- Brainstem disease (e.g. neoplasia).
- Cats – pyloric dysfunction.
- Snake bite.

f. Canine dysautonomia.

g. Cats – feline dysautonomia (Key-Gaskell syndrome).

h. Hypertrophic muscular dystrophy.

i. Thiamine deficiency.

BASED ON THE LITERATURE  
WHICH IS THE MOST LIKELY  
DIFFERENTIAL DIAGNOSIS?

## Little Black, ALH, FS, 16 years

### Imaging findings in 11 cats with feline dysautonomia

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Danielle A Gunn-Moore BSc, BVM&S, PhD, MACVSc, MRCVS, RCVS, Specialist in Feline Medicine<sup>2</sup>,  
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*Journal of Feline Medicine and Surgery* (2010) 12, 584–591  
doi:10.1016/j.jfms.2010.01.012

Dysautonomia is caused by degeneration of the autonomic ganglia. Failure of the autonomic system affecting the gastrointestinal and urinary tracts can cause

then. The aetiology of the disease is unclear, although association with *Clostridium botulinum* neurotoxin has been described in both horses and cats.<sup>3,4</sup> Canine dys-

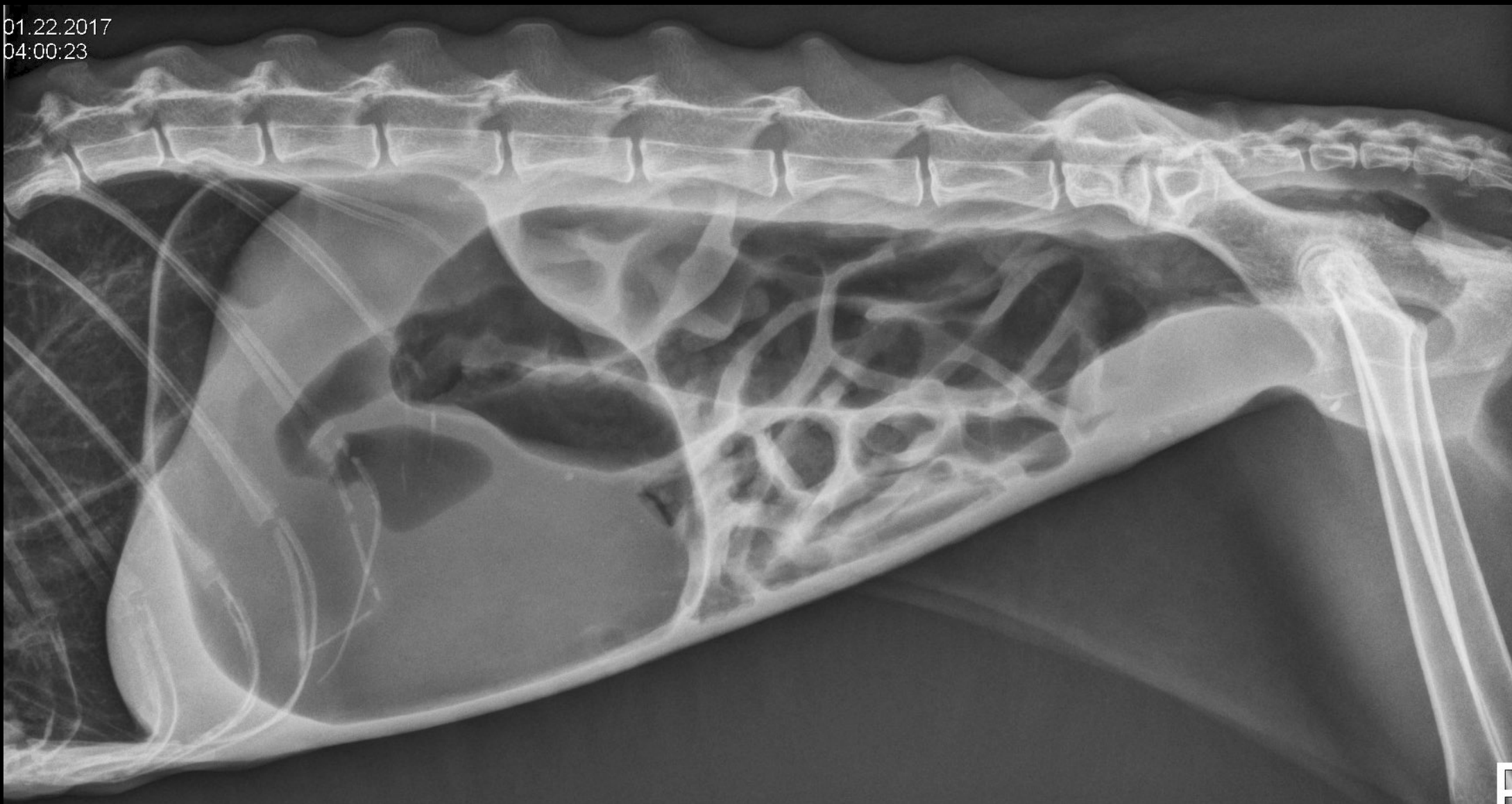
The diagnosis is suspected based on clinical signs. Pharmacological testing can be performed to provide supportive evidence for a diagnosis. Response to ocular instillation of dilute pilocarpine drops (0.05–0.1%) and subcutaneous injection of low doses of bethanecol chloride have been used to rule out the inability of the iris and detrusor muscles to contract and thus suggest denervation hypersensitivity, which would indicate a postganglionic lesion.<sup>7,10,11</sup> Although the diagnosis is confirmed by histopathological examination, recognition of the radiographic abnormalities, along with the clinical signs and neurological findings, and pharmacological and physiological autonomic function testing, might aid to support the suspected diagnosis and to assess the range of associated changes in the affected patients.

**Table 1.** Range and frequency of the presented clinical signs.

Clinical sign	Number of animals (percentage)
Vomiting	11 (100%)
Anorexia	9 (82%)
Midriasis	9 (82%)
Regurgitation	8 (73%)
Decreased pupillary reflex	8 (73%)
Decreased tear production	8 (73%)
Lethargy	7 (64%)
Third eyelid prolapse	7 (64%)
Constipation	7 (64%)
Dehydration	5 (45%)
Dysphagia	5 (45%)
Dysuria/urinary retention	5 (45%)
Dry mucous membranes	5 (45%)
Weight loss	5 (45%)
Bradycardia	4 (36%)
Coughing	2 (18%)
Dyspnoea	1 (9%)

IT COULD BE DYSAUNTONOMIA,  
HOW I CONFIRM MY SUSPICION?

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LITTLE BLACK:

POSITIVE PILOCARPINEE AND BETANEECOL TEST

FELINE DISAUNTONOMIA CONFIRMED

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AYDER MATTHEW



## LIST YOUR MOST LIKELY DIFFERENTIAL DIAGNOSIS

- Dysautonomia
- Suspected underlying feline asthma
- The rib fractures are likely secondary to the chronic cough
- Pneumonia (ventral alveolar pattern)

## CONCLUSIONS

- This cat that was likely affected by chronic feline asthma, and had several differently timed rib fractures, most likely due to the chronic cough, developed dysautonomia
- The distended esophagus was most likely the cause for the pneumonia

## CONCLUSIONS

DID YOU GET THE RIGHT DIAGNOSIS?

IF NO... SEE YOU IN CHINA!

YOU WILL BE SURPRISE BY HOW MANY PATHOLOGIES CAN  
BE DIAGNOSED BY RADIOGRAPHS!