

# What's Your Radiographic Diagnosis?

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## *Clinical History*

The patient was a 15 weeks old German Shepherd bitch. She had been vomiting for the past 9 weeks; at first she would vomit immediately after meals, but now

up to 4-5 hours would elapse between ingestion and regurgitation of food. All other clinical signs were normal, but the animal was emaciated.

Right recumbent lateral, and ventro-dorsal radiographs were taken of the thorax (Fig. 1). What is your radiographic diagnosis?

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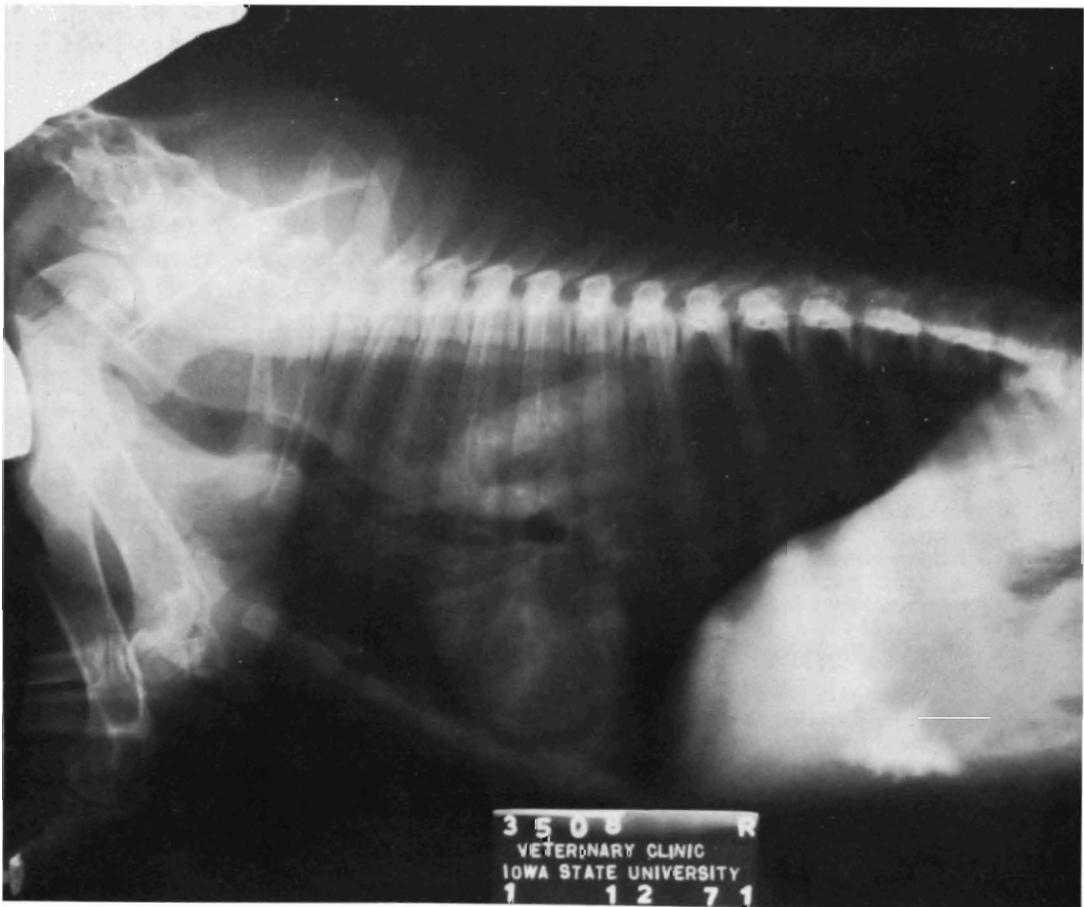


Figure 1: Right lateral view of the thorax.

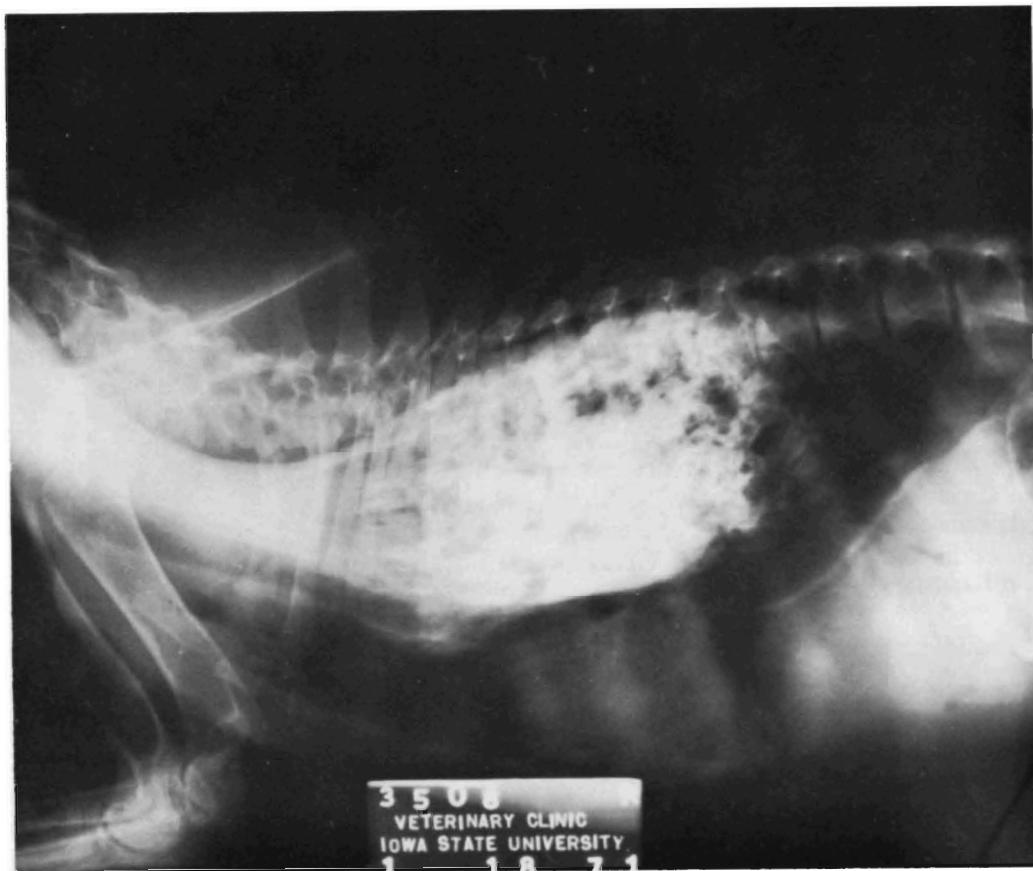


Figure 2: Right lateral view of the thorax.

### ***Diagnosis***

Esophageal achalasia. The thoracic trachea is displaced ventrally by a well outlined cylindrical structure which is less dense than surrounding soft issue, but more dense than the adjacent trachea. This is the dilated esophagus distended with fluid and air.

### ***Treatment***

At surgery there was no obvious abnormality at the terminal esophagus, but the pylorus was considered to be thickened, so a pyloromyotomy was performed. Three days later further radiographs were taken after allowing the bitch to eat a mixture of canned dog food and barium sulphate. Figure 2 was taken immediately after ingestion, and shows very dramatically the dimensions of the still dilated esophagus.

Figure 3 was taken 2 hours later. The food was still in the esophagus, and none had passed into the stomach.

The animal was prepared for surgery three days later, and an esophagomyotomy performed, but the dog died just after recovery from anesthesia.

### ***Discussion***

The barium "meal" technique of giving food mixed with barium is a good one for showing aberrations in the course or outline of the esophagus. It is contra-indicated where an obstruction or intra-luminal growth is expected, as the barium and food will mask any such lesion.

Classically, non-obstructive esophageal dilatation will occur at one of three stages of life. The achalactic type is noted immediately after the animal is weaned onto solid food. The second type occurs in dogs

