Drugs for Anesthetic Emergencies

Indication	Drug	Dosage and Route
Laryngospasm	Topical xylocaine	To effect topical
Bradycardia	Atropine sulfate Isoproterenol	0.02 mg/lb, I.V., I.M.
Bradycardia and weak pulse		1 vial/80 cc saline I.V. to effect drop by drop
Weak pulse	Ca gluceptate or gluconate	2–5 ml I.V. slowly
Apnea	Doxapram HCl	1 cc/40 lbs.
Tachycardia and cardiac arrhythmias	lidocaine without epinephrine	2–5 ml, I.V.
Shock	Solu-delta- cortef dexamethasone sodium bicarbonate lactated Ringer's	5 mg/lb I.V. 2 mg/lb I.V. 2–5 mEq/lb I.V. to effect
Cardiac failure	epinephrine	0.5–3 ml (1:10,000)

What's Your Radiographic Diagnosis?

by
James Roth *

HISTORY

On May 11, 1973 a nine-year-old male Chesapeake Bay Retriever was admitted to the Stange Memorial Clinic as a referral case with a tentative diagnosis of a diaphragmatic hernia.

The dog had been observed to be anorexic on April 1 and had developed a cough. It was then presented to a veterinarian, who upon examination, diagnosed a "liver problem." He dispensed medication for this.

Two weeks later the dog was again presented to the veterinarian, because he was still coughing and retching and had developed ventral cervical edema. The veterinarian tentatively diagnosed a diaphragmatic hernia. There had been no history of injury.

Physical examination at the Stange Memorial Clinic revealed rapid, spasmodic inspiration with a thoracic and abdominal segment. A perianal tumor was also present. The differential diagnosis at this time included diaphragmatic hernia, neoplasia, and heartworms. The radiograph in figure 1 was then taken. The radiograph revealed the presence of fluid, which obscured the thoracic contents. Thoracentesis revealed no fluid on the right side. On the left side a red cloudy fluid, which would not clot, was aspirated. A bacterial culture of this fluid was negative, and it had a protein content of 2.4 mg% , with a pH of 7. The fluid contained mostly erythrocytes, with a few PMN's, macrophages, and mesothelial cells. The cytology was not suggestive of neoplasia, and it was not suppurative.

The dog was treated with 10cc of Isuprel* elixir three times daily and penicillin-streptomycin twice daily for the next three days.

After some fluid had been removed from the chest on May 14, the radiograph in Figure 2 was taken. Then barium was administered orally, and the radiograph in Figure 3 was taken.

What is your radiographic diagnosis?

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* Winthrop Laboratories brand of isoproterenol. Winthrop Laboratories Division of Sterling Drug Inc., New York, N.Y. 10016.

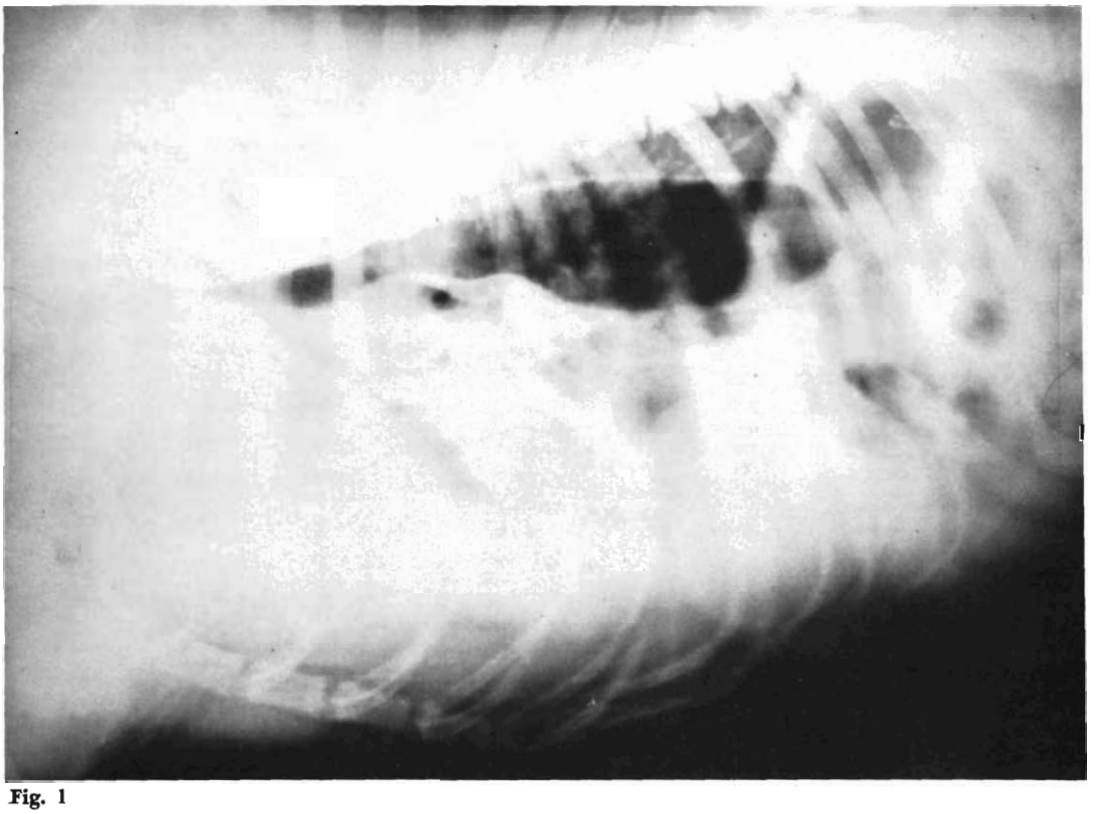

Fig. 1

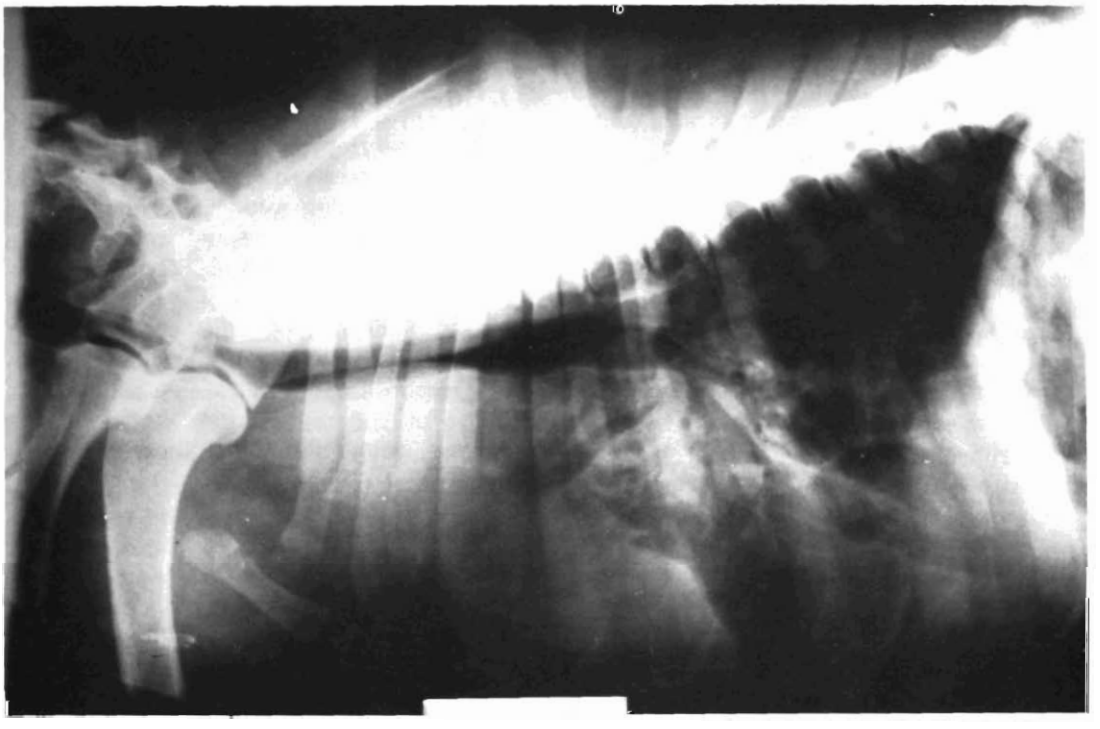

Fig. 2

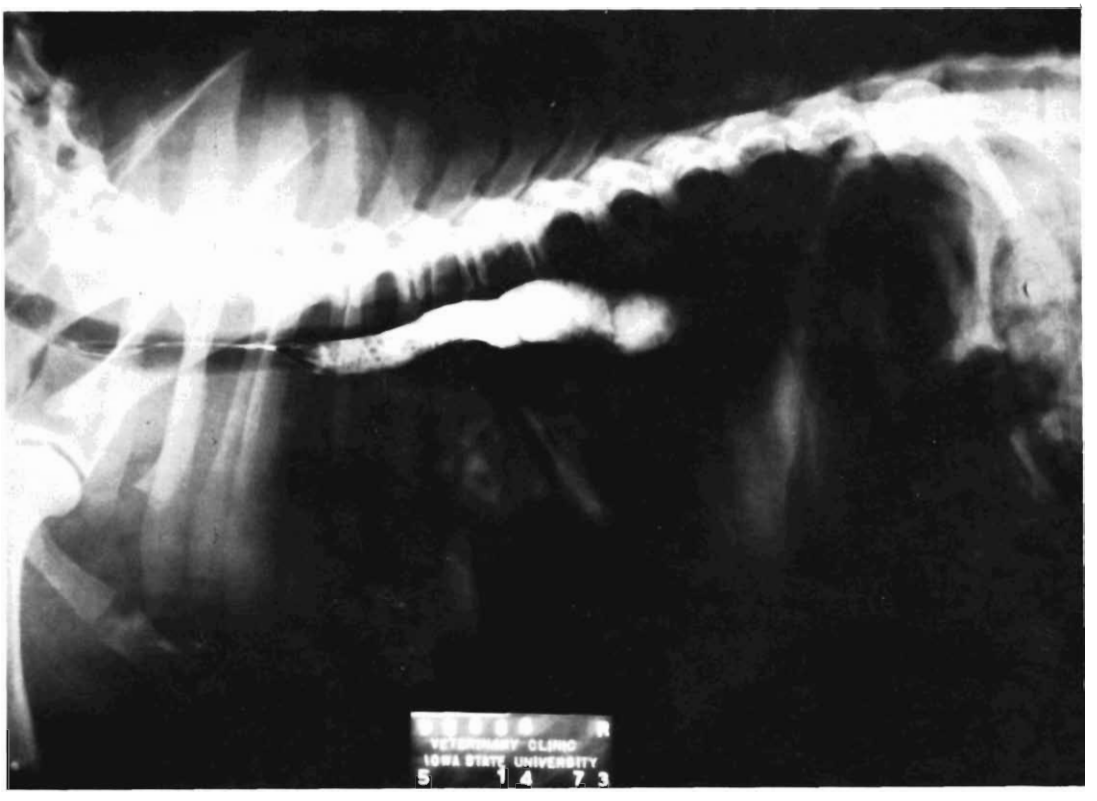

Fig. 3

DIAGNOSIS

There is a space-occupying lesion in the anterior mediastinum which is causing a narrowing of the esophageal lumen, which can be seen on Figure 2. This is confirmed by the barium study in Figure 3.

SEQUEL

The restriction would not allow the passage of an esophagoscope.

On May 15 an exploratory thoractomy was performed. Gross enlargement of the anterior mediastinal lymph nodes was found. The dog was euthanized. Histopathological examination revealed that this was lymphosarcoma.

DISCUSSION

The anterior mediastinal lymph nodes are a rather common site for lymphosarcoma in the dog and cat. This tends to implant on the pleura and invade the anterior lobes of the lungs. Cytological examination of the pleural fluid in a case of lymphosarcoma will usually reveal atypical lymphocytes. Surgical treatment of lymphosarcoma is rarely indicated because of the multicentric nature of the disease, inoperable local involvement, or both.

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