

What Is Your Diagnosis?

In cooperation with

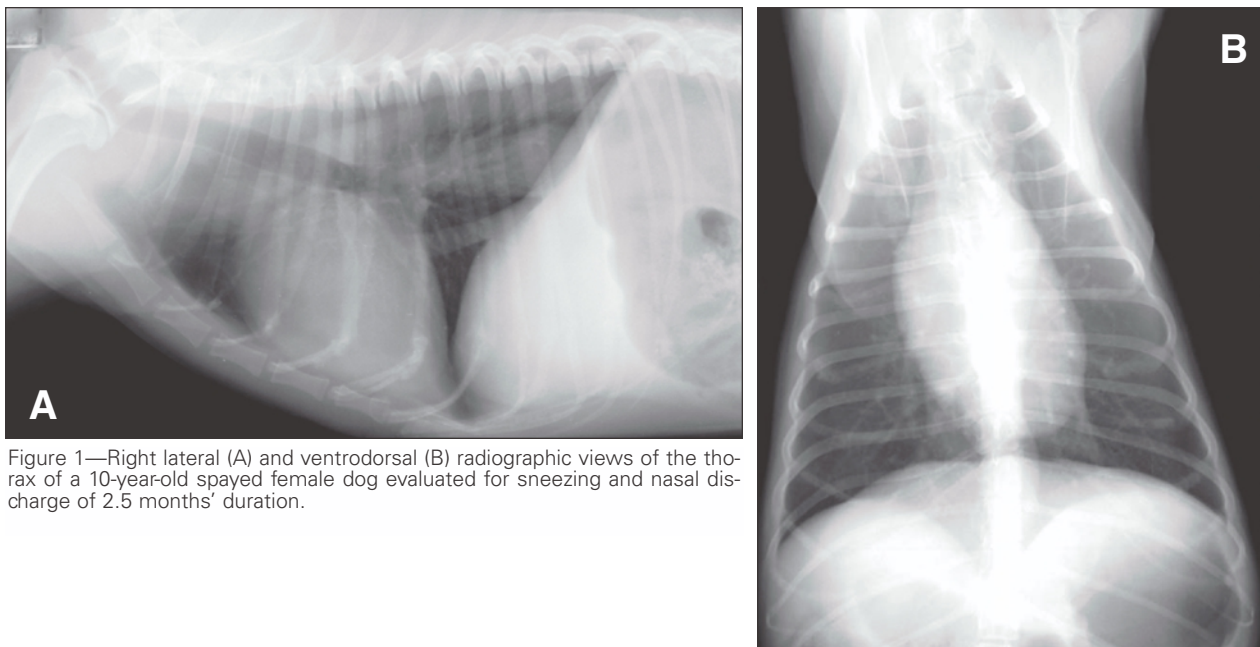


Figure 1—Right lateral (A) and ventrodorsal (B) radiographic views of the thorax of a 10-year-old spayed female dog evaluated for sneezing and nasal discharge of 2.5 months' duration.

History

A 10-year-old spayed female Maltese was referred for evaluation of sneezing and nasal discharge of 2.5 months' duration. The dog also had a history of chronic regurgitation. On physical examination, the mandibular lymph nodes were large and a mass was detected underneath the dog's tongue. No abnormalities were detected on radiographs of the cervical area and abdomen. Radiographs of the thorax were also obtained (Figure 1).

Determine whether additional imaging studies are required, or make your diagnosis from Figure 1—then turn the page ▶

This report was submitted by Sandra M. Axiak, DVM; Stephan Carey, DVM; and Diana Rosenstein, DVM, MS, DACVR; from the Department of Small Animal Clinical Sciences, Veterinary Teaching Hospital, College of Veterinary Medicine, Michigan State University, East Lansing, MI 48824-1314. Dr. Axiak's present address is Gulf Coast Veterinary Specialists, Veterinary Cancer Associates, 1111 W Loop S, Houston, TX 77027. Address correspondence to Dr. Axiak.

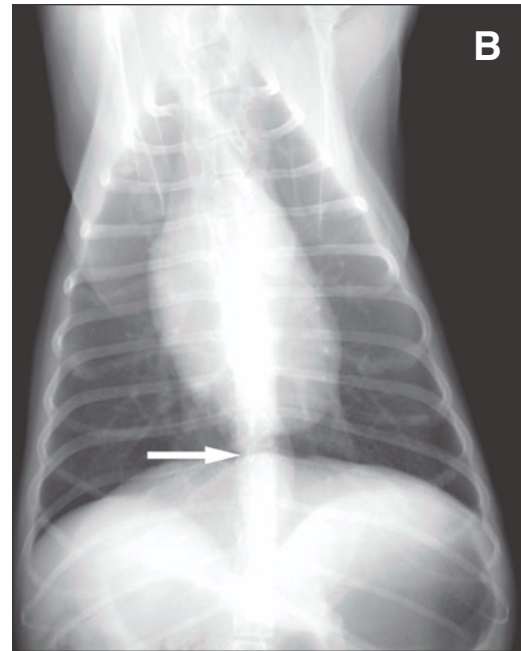
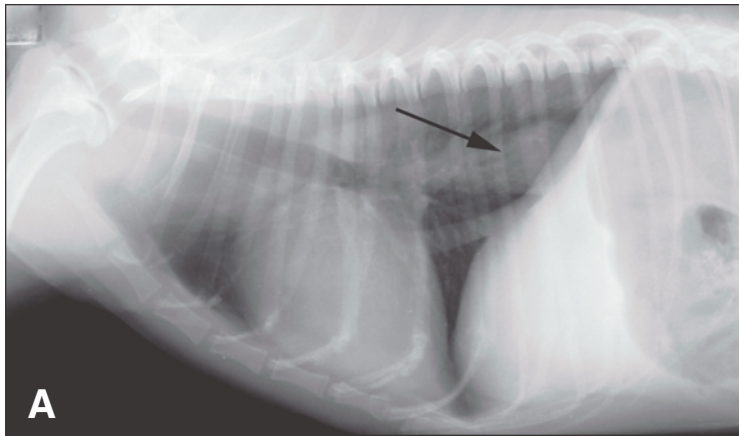


Figure 2—Same radiographic views as in Figure 1. Notice a soft tissue opacity in the caudodorsal portion of the thorax (black arrow) and widening of the caudal mediastinum (white arrow).

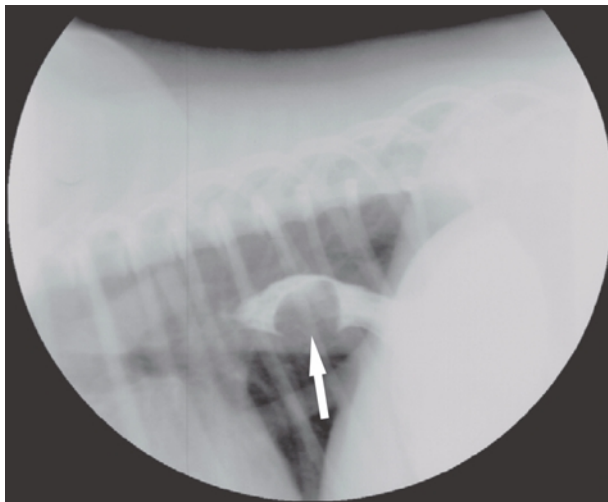


Figure 3—Right lateral esophagogram of the dog in Figure 1. Notice a radiolucent filling defect in the lumen of the esophagus (arrow).

Radiographic Findings and Interpretation

On the lateral radiographic view, a soft tissue opacity is evident in the caudal aspect of the dorsal portion of the thorax and is believed to be the esophagus (Figure 2). Widening of the caudal mediastinum is evident on the ventrodorsal radiographic view, which is presumably caused by enlargement of the esophagus. Differential diagnoses included an esophageal mass, esophageal foreign body, megaesophagus, and diaphragmatic or hiatal hernia.

Comments

An esophagogram was obtained during fluoroscopy. No abnormalities in bolus formation and esophageal motility were seen. A circular filling defect (1.5 × 1.5 cm) with smooth margins was detected in the

caudal portion of the esophagus and did not move throughout the procedure (Figure 3). An esophageal mass was confirmed during endoscopy.

A right lateral thoracotomy was performed to remove the esophageal mass, and the mass beneath the tongue was removed at the same time. Histologic examination of the esophageal mass revealed a low-grade spindle cell sarcoma with complete excision. Histologic examination of the mass beneath the tongue revealed ulcerative and suppurative glossitis. Prior to referral, cytologic examination of a fine-needle aspirate obtained from both mandibular lymph nodes by the referring veterinarian confirmed that the lymph nodes were reactive. Clinical signs resolved after removal of the esophageal mass.

Primary esophageal cancer in dogs is uncommon, and reported types include squamous cell carcinoma, fibrosarcoma, and osteosarcoma.¹ The parasite *Spirocerca lupi* has also been found to induce sarcoma formation.¹ Clinical signs in dogs include sneezing, nasal discharge, and ptyalism; regurgitation can occur as the size of the mass increases.¹ In general, the prognosis for esophageal cancer in dogs is poor because of difficulty in obtaining complete excision of the mass and radiosensitivity of surrounding structures; however, complete excision can be curative.²

1. Withrow SJ. Esophageal cancer. In: Withrow SJ, MacEwen EG, eds. *Small animal clinical oncology*. 3rd ed. Philadelphia: WB Saunders Co, 2001;320–321.

2. Hamilton TA, Carpenter JL. Esophageal plasmacytoma in a dog. *J Am Vet Med Assoc* 1994;204:1210–1211.