

What Is Your Diagnosis?



Figure 1—Right lateral and ventrodorsal radiographic views of a dog with a 2-year history of intermittent lameness and acute onset of hind limb paresis.

History

A 13.5-year-old Old English Sheepdog was referred for evaluation of hip dysplasia. The dog had a 2-year history of intermittent lameness and acute onset of hind limb paresis. Radiographs of the lumbar vertebral column were obtained (Fig 1).

Make your diagnosis from Figure 1—then turn the page ▶

Diagnosis

Radiographic diagnosis—Mixed proliferative and osteolytic lesions are evident throughout the sixth lumbar vertebral body. The oblique, radiolucent line in the caudal portion of the body of the same vertebra is characteristic of a pathologic fracture. Severe spondylosis deformans of the lumbar vertebral column and lumbosacral joint also is evident.

Comments

Lesions in the sixth lumbar vertebral body were suggestive of neoplasia or spondylitis. The differential diagnosis includes primary bone tumor, metastatic bone tumor, and bacterial or fungal spondylitis. On the basis of the history and signalment, a primary or metastatic bone tumor was suspected. Because of the poor prognosis, the owners elected to have the dog euthanized.

Primary hemangiosarcoma of the sixth lumbar

vertebral body was diagnosed histologically. Metastatic neoplasia was not found. The acute onset of hind limb paresis most likely resulted from the pathologic fracture secondary to the primary bone tumor. Primary hemangiosarcoma accounts for 4 to 10.5% of primary bone neoplasms of the vertebral column in dogs, with osteosarcoma being the most common.^{1,2}

1. Morgan JP, Ackerman N, Bailey CS, et al. Vertebral tumors in the dog: a clinical, radiologic, and pathologic study of 61 primary and secondary lesions. *Vet Radiol* 1980;21:197-212.

2. Parchman MB, Cramer FM. Primary vertebral hemangiosarcoma in a dog. *J Am Vet Med Assoc* 1989;194:79-81.

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