1985

What's Your Radiographic Diagnosis?

Dave Stelling  
_Iowa State University_

Sandra McNeel  
_Iowa State University_

Follow this and additional works at: https://lib.dr.iastate.edu/iowastate_veterinarian

Part of the Large or Food Animal and Equine Medicine Commons, and the Radiology Commons

Recommended Citation

Stelling, Dave and McNeel, Sandra (1985) "What's Your Radiographic Diagnosis?," _Iowa State University Veterinarian_: Vol. 47 : Iss. 2 , Article 13.  
Available at: https://lib.dr.iastate.edu/iowastate_veterinarian/vol47/iss2/13

This Article is brought to you for free and open access by the Journals at Iowa State University Digital Repository. It has been accepted for inclusion in Iowa State University Veterinarian by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
What's your Radiographic Diagnosis?

Dave Stelling*
Sandra McNeel, DVM**

History
A five-year-old Weimaraner was presented with a seven-month history of ataxia progressing slowly from a left hind leg lameness to paraparesis.

Examination
On exam, atrophy of the semimembranosus and semitendinosus muscles, general thinness, and dehydration were noted. Clinical data included a mild hyperglycemia (118 mg/dl) and hypoalbuminemia (2.7 gm/dl). Other parameters were within normal limits. Neurological examination revealed bilateral ataxia, weakness, and knuckling, with proprioceptive and visual placing deficits, of the hindlimbs. Patellar reflexes were present but central recognition of pain was poor and there was a diminished withdrawal response from the toe-pinch stimulus. No forelimb abnormalities were noted. These findings were summarized as bilateral lower motor neuron signs with respect to the ischiatic nerves.

Radiographs
Survey radiographs (Fig. 1, only lateral shown): There is widening of the neural canal of vertebra L-4, due primarily to thinning of the dorsal portion of the neural arch. The small focus of calcification seen at the dorsal

---

*Mr. Stelling is a third-year student in the College of Veterinary Medicine at Iowa State University.
**Dr. McNeel is an Associate Professor of Veterinary Clinical Sciences at Iowa State University.
aspect of the L-3/4 disc space appears on the VD projection as being due to lateral spondylosis extending from the caudal right margin of the L-3 vertebral body. Based on these findings, a myelogram was performed.

Myelogram (Fig. 2, only lateral shown): A large (1.4 x 1.8 x 0.9 cm) mass was present at L-4 along the ventral portion of the neural canal, displacing the spinal cord dorsally. The widening of the subarachnoid space adjacent to the mass creates the "golf tee" sign characteristic for intradural/extramedullary mass lesions.

Diagnosis

A tentative diagnosis of neurofibroma/meningioma was made, this being the most common cause of intradural/extramedullary masses. Owners elected euthanasia and authorized post-mortem examination.

Necropsy revealed a cream-colored, multilobular tumor located subdurally on the ventral side of the spinal cord at vertebra L-4. It was described histopathologically as dense collagenous stroma and neoplastic cells apparently arising from pia mater, and was diagnosed as an intradural spinal meningioma with compression of the spinal cord. Spinal cord lesions were limited to areas within 1 cm of the tumor.