Veterinary MRI and RT Center of New Jersey

www.vetMRIRT.com

Case Report #11

MRI allows detailed imaging of a subtle tumor in the spine. It also allows soft tissue differentiation that would be impossible with a myelogram or standard radiographs.

Spinal Mass

Case Summary: A 7yr. MN Labrador Retriever was presented for MRI of the thoracic and lumbar spine to identify the cause of acute rear paraparesis starting the day before. The patient was treated a few years ago for a clinical episode of Lyme disease. The patient is presently on prednisolone with no significant changes in condition. No other health problems were reported.

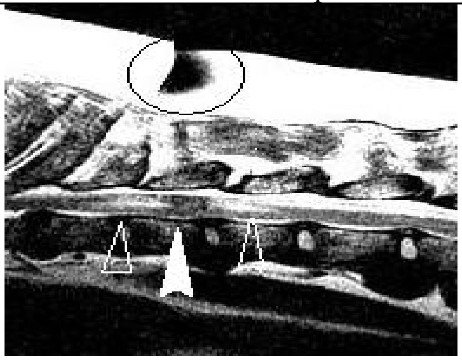

Figure 1: sagittal T2w image of affected cord. Note the hypointense area over T11 (solid arrowhead) with areas of adjacent hyperintense signal (open arrowheads). Also note magnetic susceptibility artifact (black circle).

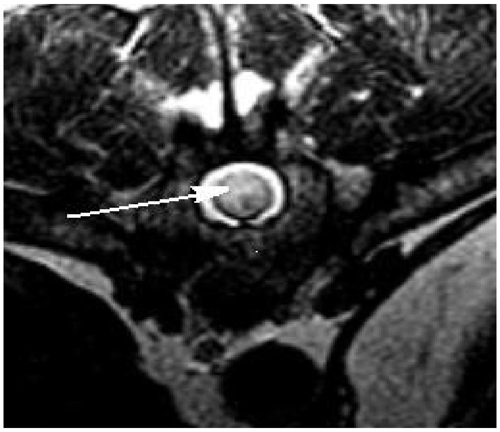

Figure 2: axial T2w image of adjacent hyperintense signal (arrow)

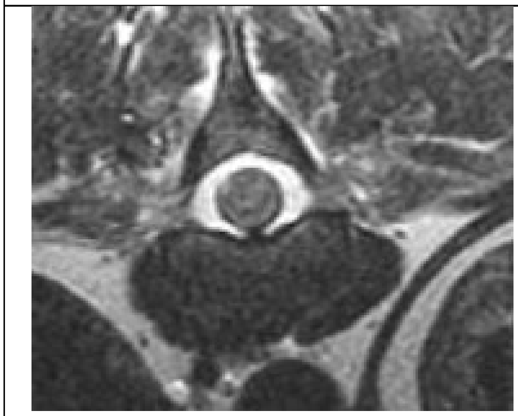

Figure 3: T1w pre-contrast image. Note the isointense signal and how difficult it is to see the lesion in the cord.

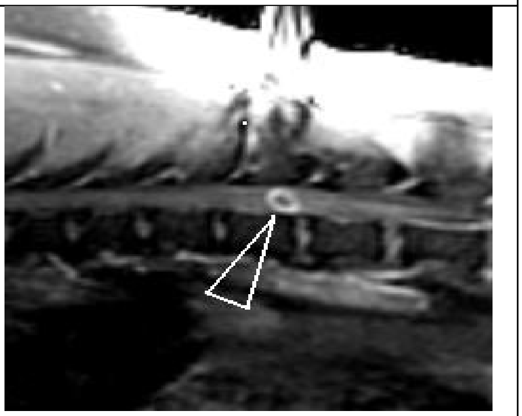

Figure 4: T1w post-contrast image. Note ring enhancing pattern of the intramedullary mass (open arrowhead).

Findings: The spinal cord appears slightly swollen and decreased in signal intensity to the adjacent tissue over the body of T11 on T2w images. This same area on T1w images appear isointense but has a ring enhancing pattern measuring 7-8mm diameter after contrast administration. The areas approximately one vertebral segment cranial and caudal are abnormally increased in signal intensity on the same T2w images.

There was also a 3.2cm diameter hypointense mass noted arising from the tail of the spleen bulging from the visceral margin identified on sagittal images of the lumbar spine which included the central portion of the abdomen.

Imaging Diagnosis: Intra-medullary spinal cord lesion at T11 consistent with neoplasia (primary or metastatic), or less likely a granuloma. Nodule visible on spleen may represent a primary splenic tumor such as a hemangiosarcoma or lymphoma, or a hyperplastic nodule.

Outcome: Unfortunately due to the multiple areas of disease (spleen and spine), surgery and/or external beam radiotherapy was not highly recommended by consulting specialists, because of the intramedullary location of the tumor and likely secondary damage to the remaining tissue in the cord. Chemotherapy was also discussed with the owners with the understanding that any cord damage already present would be irreversible and the overall prognosis for the MRI findings was poor.

Please do not hesitate to contact our facility to discuss the value of a CT or MRI study for a particular patient prior to requesting an imaging study.
(Tel – 973 772-9902, Fax – 973 772-9904)