



VETERINARY

MRI + RADIOTHERAPY
CENTER OF NEW JERSEY

Veterinary MRI and RT Center of New Jersey

Case Report

March 2010

Computed Tomography for Metastatic Check

CT reveals small anatomical details obscured on radiographs by overlapping structures.

Early and complete detection of metastatic disease is critical in providing owners with an accurate prognosis.

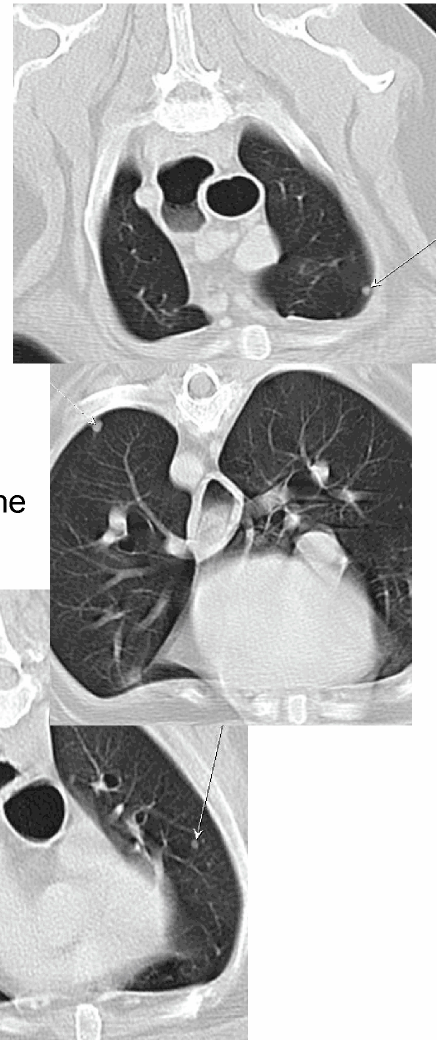
Computed tomography has developed into a much more accessible tool for evaluating the many complex structures of the thorax. Thoracic CT provides a more sensitive examination than does our most traditional diagnostic test, thoracic radiographs. Thoracic radiographs are capable of demonstrating pulmonary nodules that are approximately 5mm in diameter or larger. In contrast, CT examination reveals nodules that are as small as 2-3mm in diameter.

Clinical Case Info...

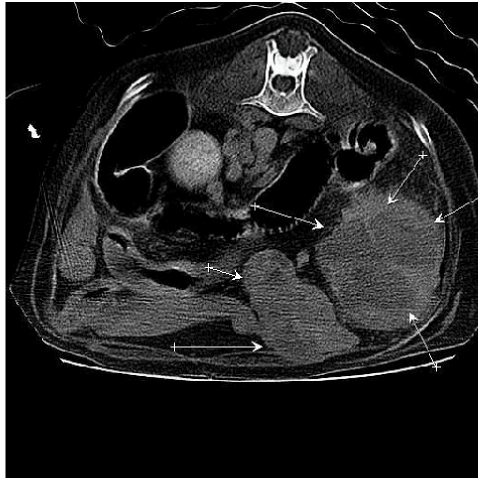
Timber is a 12 year old male castrated Labrador Retriever who presented to the Veterinary MRI and RT Center for staging following identification of a splenic mass on abdominal ultrasound.

Previous thoracic radiographs revealed no evidence of metastatic disease. However, computed tomography was successful at identifying multi-focal metastatic pulmonary lesions 2-4mm in diameter. Multiple lesions were noted in the pulmonary parenchyma (see arrows).

A spherical mass approximately 6cm in diameter was also noted on the spleen in the caudal aspect of the series. Hounsfield units, a measurement of tissue density, was used to determine that this mass was likely malignant in origin (see image on next page).



CT is capable of identifying pulmonary lesions approx 2-4 mm in diameter



Discussion

CT has the ability to provide information concerning small anatomic details that may be obscured by overlapping thoracic structures, which is preferable when assessing the pulmonary parenchyma for metastatic disease. CT is more sensitive than thoracic radiographs in identifying metastatic lesions leading to earlier and more complete detection, as well as providing owners with a more accurate prognosis.

If you have any questions regarding the value of CT or MRI evaluation for a particular patient please do not hesitate to contact our facility to discuss the case prior to requesting an imaging study.

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**This case report can now be viewed on our website
www.vetmirt.com by clicking on the hyperlink “case report”
under “for veterinarians”.**
