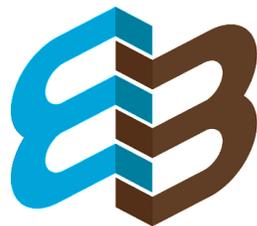


Case Study MRI for Soft Tissue Injuries



**BUSH ADVANCED
VETERINARY IMAGING**

MRI is a Valuable Diagnostic Tool for Soft Tissue Injuries



Signalment, History, and Physical exam findings

A seven year old intact male Chesapeake Bay Retriever was presented for an MRI of the right shoulder. He had an 18 month history of right thoracic limb lameness which had become more severe over the previous four weeks. On physical exam, the dog was bright, alert, and responsive, but he had a grade I/IV lameness in the right thoracic limb. There was pain on shoulder flexion and moderate muscle atrophy.

Lesion Localization and Differential Diagnosis

Radiographs showed mild mineralization of the biceps tendon. Differential diagnosis would include supraspinatus tendinopathy, biceps tenosynovitis, or biceps tendon tear.

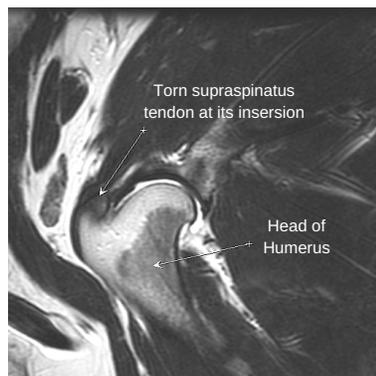


Figure 1

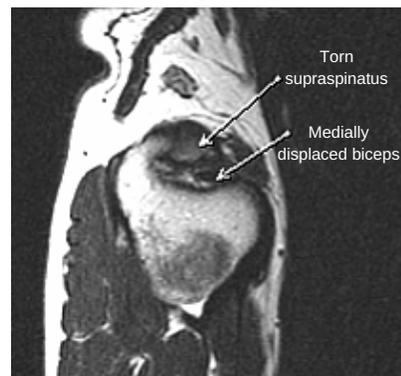


Figure 2

MRI Findings

An MRI of the right shoulder was performed. Multiple sequences show the presence of an abnormal insertion of the supraspinatus on the medial aspect of the greater tuberosity. There is tearing at the myotendinous junction. (Fig.1)

This tearing of the supraspinatus results in a collagenous mass that is causing medial displacement of the biceps tendon within the bicipital groove. (Fig. 2)

Conclusion

With the increased use of MRI in veterinary medicine we are able to image soft tissue structures and obtain an accurate and definitive diagnosis. MRI also allows us to determine the severity of the injury and the ability to look at other surrounding structures to be certain no other pathology is present. All of this allows guided therapy for the patient; whether that be rehabilitation therapy, shock wave therapy, stem cell and platelet rich plasma therapy or surgical correction it ultimately leads to a quicker diagnosis, quicker intervention, quicker return to function and less secondary changes. In this case, due to the severity of the damage, surgical correction was chosen. Dogs that undergo surgery for supraspinatus injury often have a noticeable improvement in their gait within days of surgery and continue to rapidly recover to normal function in the affected limb.

***This case was referred for imaging by Dr. Lazar of Veterinary Surgical Center in Leesburg, VA. Thank you for referring this interesting case.

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Technology is changing the way we practice medicine but it can be very difficult keeping up with all of the advances. Let us help. We are available to meet with you and your staff to discuss the value of MRI and CT imaging in the practice of veterinary medicine. Call us today to arrange a meeting. We'd be happy to bring in breakfast, lunch, or dinner.

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