



**PATIENT PRESENTING CLINICAL SIGNS**

Enzo Angus  
**SPECIES**  
 Canine  
 Enzo is an active dog who presented with an initially intermittent RFL last May. It has since become more continuous, and is flared after exercise and getting up from a lying position. Playing with other dogs and running on challenging terrain is more likely to induce the lameness. On examination, there was consistent pain on right glenohumeral extension and abduction. The left shoulder had inconsistent pain on extension. rDVM radiographs reviewed by an ACVR found mild left sided degenerative changes in the elbow and carpus, with sclerosis of the biceps groove, but no abnormalities on the right

**BREED ULTRASONOGRAPHIC FINDINGS**

Golden Retriever **Left Shoulder**

**SEX**  
 MN  
**AGE**  
 2 Years  
 The average maximum thickness of the left supraspinatus is 8.5mm. Mild internal echoarchitectural remodeling is seen. There is no evidence of biceps impingement. The supraspinatus, deltoideus, and infraspinatus muscles present within normal limits for shape, volume, echoarchitecture and echogenicity. The attachment to the bone surface of the greater humeral tubercle is even and smooth. The infraspinatus muscle condenses and narrows down to a long tendon of even width, smooth outline and regular echogenic fibular echoarchitecture and up to the attachment to the bone surface of the humerus. There is no evidence of enlargement of the infraspinatus bursa.

The biceps tendon can be seen from its origin through the bicipital groove, up to the musculotendinous transition and is within normal limits for shape, echogenicity and echoarchitecture. There is no evidence of synovial thickening and no evidence of abnormal effusion. The bone surface of the bicipital groove is even and smooth.

**INTERPRETED BY**

Nele Eley, DVM  
 Dr. med. Vet. DipECVDI

The visible margins of the shoulder joint are within normal limits.

**Right Shoulder**

**HOSPITAL NAME**

Points East West  
 Veterinary Services

The right supraspinatus tendon measures 9.5mm at average maximum thickness with moderate internal echoarchitectural remodeling and occasional nonshadowing echogenic foci. There appears to be early biceps impingement. No evidence of biceps tenosynovitis is noted. The supraspinatus, deltoideus and infraspinatus muscles present within normal limits for shape, volume, echoarchitecture and echogenicity. The transition to the supraspinatus tendon is even and thin. The attachment to the bone surface of the greater humeral tubercle is even and smooth. The infraspinatus muscle condenses and narrows down to a long tendon of even width, smooth outline and regular echogenic fibular echoarchitecture and up to the attachment to the bone surface of the humerus. There is no evidence of enlargement of the infraspinatus bursa.

**REFERRING VET**

David Lane

The biceps tendon can be seen from its origin through the bicipital groove, up to the musculotendinous transition and is within normal limits for shape, echogenicity and echoarchitecture. There is no evidence of synovial thickening and no evidence of abnormal effusion. The bone surface of the bicipital groove is even and smooth.

**INVOICE**

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The visible margins of the shoulder joint are within normal limits.

**DATE**

12-16-22



**PATIENT**

Enzo Angus

**ULTRASONOGRAPHIC DIAGNOSIS**

- Bilateral supraspinatus tendinopathy, right more than left.
- Suspect early biceps impingement in the right shoulder.

**SPECIES**

Canine

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The ultrasonographic study reveals echoarchitectural changes within both supraspinatus tendons with mild volume increase on the right side supporting bilateral supraspinatus tendinopathy. Early impingement of the biceps tendon is noted on the right side which, however, is at this time not concurred by ultrasonographic signs of tenosynovitis. The clinical significance of which is uncertain.

**BREED**

Golden Retriever

**SEX**

MN

**AGE**

2 Years

**INTERPRETED BY**

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Dr. med. Vet. DipECVDI

**HOSPITAL NAME**

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Veterinary Services

**REFERRING VET**

David Lane

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

**INVOICE**

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Nele.Eley@sonopath.com

**DATE**

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