



# COMPANION ANIMAL

Clinical Cases Award



## Primary flexor enthesopathy in three immature labrador retrievers

Steven M. Pil, DVM

Small Animal Department, Faculty of Veterinary Medicine  
Ghent University, Salisburylaan 133, 9820 Merelbeke  
Belgium  
Steven.Pil@Ugent.be

Carlien C. Brondeel<sup>1</sup>, DVM; Steven M. Pil<sup>2</sup>, DVM; Evelien A. de Bakker<sup>1</sup>, DVM, PhD; Els V. Raes<sup>1</sup>, DVM, PhD, ECVDI; Bernadette Van Ryssen<sup>1</sup>, DVM, PhD

<sup>1</sup> Department of Medical Imaging of Domestic Animals and Orthopaedics of Small Animals, Faculty of Veterinary Medicine, Ghent University, Salisburylaan 133, 9820 Merelbeke, Belgium.

<sup>2</sup> Small Animal Department, Faculty of Veterinary Medicine, Ghent University, Salisburylaan 133, 9820 Merelbeke, Belgium.

### Introduction

Flexor enthesopathy is defined as an abnormality of the flexor muscles and their attachment to the medial humeral epicondyle. It can be considered primary when other underlying pathology of the elbow joint is absent (1). Accurate diagnosis and distinction between primary and concomitant forms requires plain and IV-contrast CT and arthroscopy in doubtful cases (2). Flexor enthesopathy is a condition most commonly diagnosed in adult dogs. Exceptionally, the condition is found in dogs younger than one year of age (1). Primary flexor enthesopathy can be treated with physiotherapy, with local methylprednisolone or platelet-rich-plasma injections, or the affected flexor muscles can be transected surgically (1).

### Case Description

Three immature (3-4 months of age) Labrador Retrievers were presented with unilateral front limb lameness with an acute traumatic onset 4-6 weeks prior to presentation.

### Results

At presentation all dogs showed a moderate lameness. The affected elbows were mildly distended and painful. Flexion tests confirmed the elbow as the affected site.

Lateral radiographic views showed typical mineralisations at the edge of the medial epicondyle in varying size. Computed tomography revealed bilateral flexor pathology in all dogs with an irregular outline of the medial humeral epicondyle, thickening of flexor muscles and the presence of calcified bodies. Two patients were treated with intra- and periarticular methylprednisolone injection (0.5 mg/kg) and one dog was treated surgically.

A 3-year follow-up control in two dogs demonstrated a good functional outcome, mild DJD in the surgically treated dog and no radiographic signs of DJD in the other dog. The third dog showed good clinical and radiographic results after 3 months.

### Conclusions

This clinical study describes three immature Labrador Retrievers with lesions of the flexor enthesis as a cause of lameness. Primary flexor enthesopathy should be considered in the differential diagnosis of elbow problems in very young dogs and can be treated successfully.

### References

1. de Bakker E, Gielen I, Saunders JH, Polis I, Vermeire S, Peremans K, Dewulf J, van Bree H, Van Ryssen B. Primary and concomitant flexor enthesopathy of the canine elbow. *Vet Comp Orthop Traumatol* 2013; 6: 425-434
2. de Bakker E, Gielen I, van Caelenberg A, van Bree H, Van Ryssen B. Computed tomography of canine elbow joints affected by primary and concomitant flexor enthesopathy. *Vet Radiol Ultrasound* 2014; 55: 45-55