



COMPANION ANIMAL

Clinical Cases Award



Intra-articular lipoma in a 2-year-old dog

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Introduction

Tumors originating from adipose tissues can be divided in lipomas, infiltrative lipomas and liposarcomas. Lipomas are benign tumors of adipose tissue and are relatively common in older dogs and rarely symptomatic. (1)

Case description

A 2-year-old Male entire Pitt Bull terrier was referred for a grade 2/4 pelvic limb lameness. There was a swelling proximal to the stifle joint and extending to the middiaphyseal region of the femur (Figure 1). Radiographs revealed a cranioproximal translation of the patella. MRI showed a heterogeneously hyperintense T1W and T2W signal intensity mass lesion in the left stifle joint (Figure 2). Based on the MRI images an intra-articular lipoma was suspected. The mass was surgically resected following a cranial approach of the proximal third of the femur extending to a lateral parapatellar approach of the distal part of the femur. The mass originated from the infra-patellar fat pad and extended into the muscle bellies of the quadriceps (Figure 3). Complete excision was achieved. The medial and lateral retinaculum were closed using an imbrication technique. The dog recovered uneventful from surgery and three months postoperatively the dog showed no pelvic limb lameness.

Results

Histopathology revealed proliferation of well-defined adipose tissue and fibrous tissue, consistent with a fibrolipoma, although an infiltrative lipoma could not be excluded completely. Discussion/Conclusion: this is the first case of an intra-articular lipoma originating from the infrapatellar fat pad in a dog. In human medicine, intra-articular lipomas are a rare entity, and occur most often in the stifle joint of young patients and are subclassified in true lipomas and lipomas arborescens. Full recovery is expected after surgical excision in human medicine, which was also the case in this dog. (2,3)

References

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3. Hirano K, Deguchi M, Kanamono T. Intra-articular synovial lipoma of the knee joint (located in the lateral recess): a case report and review of the literature. *The knee* 2007; 14: 63-67.



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Figure 1: Dorsal view of the patient with a distinct swelling surrounding the left stifle and femur



Figure 2: MRI, Sagittal T1W + contrast with a clear outlining of the mass



Figure 3: Top of the image is distal. The mass is lifted in the surgeons left hand, forceps is pointing at the distal femur

