



# VETCT

*Clinical support in your pocket*

## IT'S YOUR CASE

Species: Canine

Breed: Mastiff

Sex: Female Neutered

Age: 8 years

### Clinical History:

Limping on her left front limb for 3 months and painful on palpation of the bone just distal to her left elbow.

**Details of study and technical comments:** Mediolateral and craniocaudal views of the left elbow and a comparison lateral view of the right elbow are available and are of good diagnostic quality.

### Diagnostic interpretation:

Left elbow:

- Mild soft tissue swelling is noted along the caudoproximal diaphysis of the ulna.
- An ill-defined, permeative, osteolytic lesion is detected centred in the proximal diaphyseal region of the ulna (image below left) involving also the region of the medial coronoid process. This is associated with a large transitional zone between normal and abnormal bone. At this level there is thinning and focal disruption of the cortex seen along the cranial margins adjacent to the radioulnar incisure. Active periosteal reaction (brush-like-palisading) associated with sclerosis is also noted surrounding the osteolytic changes. There is reduced conspicuity of the subchondral bone of the trochlear notch of the ulna.
- There is severe osteophytosis affecting the left elbow (image below left). This is more evident along the proximal anconeal margins, proximal articular margins of the radius and in a lesser degree in the humeral epicondyles. The medial coronoid process is markedly remodelled and ill-defined. The trochlear notch is indistinct.

Right elbow:

- The changes regarding the osteophytosis in the elbow are similar but slightly less severe compared to the left (image below, right). No evidence of aggressive bone lesions.

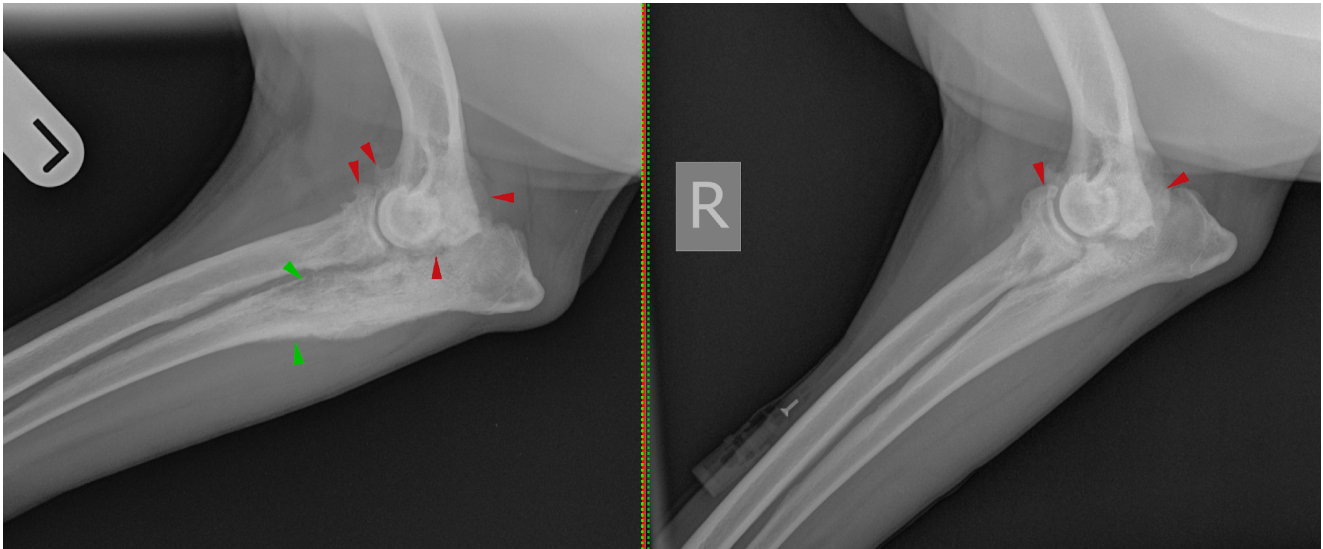


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### Conclusions:

- Monostotic aggressive osteolytic-osteoproliferative bone lesion affecting the left ulna: Main differentials include- primary bone neoplasia (osteosarcoma, chondrosarcoma, fibrosarcoma), please see below for other differentials and discussion.
- Bilateral severe elbow degenerative joint disease.

### Additional comments:

The radiographic appearance is definitive for an aggressive bone lesion of the proximal ulna as a cause of the reported clinical signs. Broadly speaking, differentials for an aggressive bone lesion are neoplasia and osteomyelitis. Specific to this case, a primary bone tumour is more probable taking into account the clinical details and the location/monostotic behaviour of this lesion (such as low grade osteosarcoma). Infection such as fungal osteomyelitis is not excluded from the radiographs but should be excluded clinically. Since the subchondral bone is involved, especially at the trochlear notch, and there is the possibility of early involvement of the humerus/radius, a primary joint based process such as synovial cell sarcoma or septic arthritis is not fully excluded. Bone biopsy and joint tap is recommended to confirm the underlying lesion.



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