

## PATIENT

Olive Thompson

## SPECIES

Canine

## BREED

Golden Retriever

## SEX

Female

## AGE

6 Months 2 Weeks

## WEIGHT

46.7 pounds

## INTERPRETED BY

Heike Rudolf, DVM, Dr.  
med. Vet., DipECVDI  
DVR

## IMAGING PERFORMED BY

Roseau County  
Veterinary Clinic

## HOSPITAL NAME

Roseau County  
Veterinary Clinic

## REFERRING VET

Dr. Michelle Maxwell

## INVOICE

14328

## DATE

03/13/26

## PRESENTING CLINICAL SIGNS

Almost 5 month old FI Golden retriever presented for lameness; pain noted by DVM along lumbar spine; x-rays declined; treatment plan for suspect IVDD with strict rest, carprofen, and gabapentin 2/9/26 - Presented for recheck lameness; muscle atrophy and lameness noted by DVM in right rear limb, no cranial drawer; x-rays of hips/back legs, but not lumbar spine; diagnosed with possible right CCLR +/- HOD; continued therapy + amantadine 3/2/26 - Presented for recheck lameness; cranial drawer noted in right hind by DVM; set up referral appt for CCLR 3/12/26 - Presented for spay; DVM noted large firm swelling at left elbow; x-rays revealed 4 different bone tumors; discussed concern for aggressive osteosarcoma with owner; treatment plan pain control; discussed poor prognosis (months); referral to RRAEH for discussion with oncologist

Abnormal PE/Chem/CBC/UA Results: CBC with morphology: mild anemia (Hct 34%); mild monocytopenia on morphology (0.11K); rest WNL Chem17: mild hyperphosphatemia (8.4); mild hypercholesterolemia (343); rest WNL Lytes: mild hyponatremia (142); rest WNL

## RADIOGRAPHIC STUDY OF ENTIRE SKELETON

R/L lateral and VD, totaling 16 radiographs provided for interpretation.

12.03.2026

## RADIOGRAPHIC FINDINGS

Multiple bone masses with a smooth outline and more or less obvious trabecular structure are present in

- Dorsal spinous process of T3
- L3/4 facet joint
- Left proximal radius
- Right P1 digit 5

The L3/4 foramen is reduced in size and obscured by dorsal bone.

I can see no stifle effusions.

## RADIOGRAPHIC DIAGNOSIS

- Multiple cartilaginous exostoses/osteochondroma
- Possible dorsal cord compression L3/4

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Multiple cartilaginous exostoses (MCE) are characterized by osteochondromatous outgrowth in the metaphyseal region of bones, most commonly seen in the vertebrae, ribs, and diaphysis of long bones in dogs. MCE lesions arise during active bone growth and are thought to cease when the dog reaches skeletal maturity with closure of the adjacent growth plates. It is considered to be a benign proliferative disease of cartilage and bone which is often discovered incidentally without clinical significance. However, MCE can be the cause of clinical problems (e.g., neurologic deficits, pain) when the proliferations compress the spinal cord, peripheral nerves, blood vessels, tendons, or ligaments. Malignant transformation is possible in adulthood. In case of spinal cord compression surgery may help ease the pain. A CT should be used for surgical guidance.



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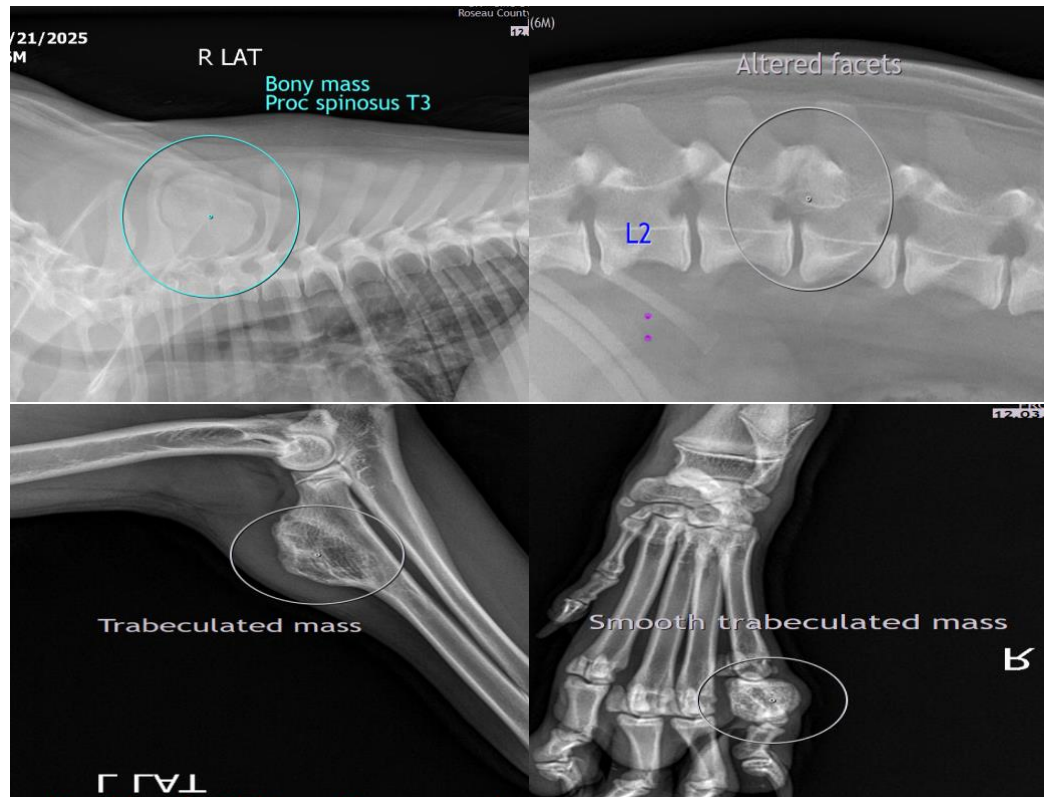
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Heike Rudolf, DVM, Dr. med. vet., DipECVDI, DVR  
[info@sonopath.com](mailto:info@sonopath.com)