



**PATIENT PRESENTING CLINICAL SIGNS**

**Ava Rodriquez**  
**SPECIES** Canine  
**BREED** German Shepherd  
**SEX** FS  
**AGE** 8 Years

P has a cut on her back right paw that has been there for a few years. P came back in 5/21/2020 for the same problem. O was taking P to Mountain View for care but it has not been resolved. Today P has green puss coming from the wound. P is limping but does put weight on it. Ava has had a progressive cough for the last 1-2 months. Radiographs - productive changes to the digits and distal metatarsal bones, soft tissue swelling of metatarsal region and digits. Diffuse bronchial changes to all lung fields, interstitial regions which obscure cardiac silhouette on VD view. FNA performed of swelling - no cells exfoliated Ear cytology - TNTC cocci AU Discussed with owners that radiographic changes may indicate chronic infection, fibrosis, and osteomyelitis of the foot with secondary pneumonia (possibly via hematogenous spread of infection). Alternatively, boney changes may indicate neoplasia with metastasis to the lungs. Advised that advanced imaging such as MRI may be needed for a definitive diagnosis and to screen for possible FB in the foot to determine if surgery may be helpful. Elect to send radiographs for radiology consult to see if this helps determine likely diagnosis. Further diagnostic/treatment options would then be possible. In the meantime, we will resume antibiotic, pain control, and address otitis.

**RADIOGRAPHIC STUDY OF THE LEFT HIND PAW & THORAX**

Mediolateral and oblique views of the left hind paw and right/left lateral and ventrodorsal views of the thorax totaling 5 images available for review in jpeg format.

Only jpg images were submitted. The transformation from DICOM to jpg only allows for limited manipulation of the image. For the best possible results, we suggest submitting DICOM images in the future. Please do not hesitate to contact us should you need any help with the submission process.

**INTERPRETED BY**

Nele Eley, DVM  
 Dr. med. Vet. DipECVDI

**RADIOGRAPHIC FINDINGS**

**Left Hind Paw**

Moderate soft tissue swelling is seen circumferential to the distal left hind limb from the digits through the distal tibia and fibula. Mild dorsal accentuation of the soft tissue swelling is seen.

The phalangeal and metatarsal bones as well as the 4th tarsal bone and calcaneus present moderate laminar and palisading periosteal new bone formations which accentuated the diaphyseal portion of the bones but extend into the metaphyses of the phalanges and metatarsals as well. No evidence of aggressive osteolytic changes is seen. There appears to be no articular involvement of the tarsal and tarsocrural joints.

The metatarsophalangeal joints present within age related normal limits.

**HOSPITAL NAME**

Mountain West  
 Veterinary Hospital

**REFERRING VET**

Mark Langheinrich

**INVOICE Thorax**

56373 Moderate bridging spondylosis deformans is present between T2/3, T3/4, T11/12.

**DATE**

1-24-23

The degree of pulmonary inflation is deep. A mixed interstitial alveolar lung pattern is seen accentuating the ventral lung field. The remainder of the lung presents a mild generalized bronchointerstitial pattern. Volume loss and increased opacity of the left lung with mediastinal shift towards the left side are seen.

**PATIENT**

Ava Rodriquez

The cardiac silhouette presents no gross abnormality. There is no evidence of a vascular lung pattern.

Course and width of the trachea are considered within normal limits.

**SPECIES**

Canine

No evidence of mediastinal lymphadenomegaly or other mediastinal mass effect is seen.

**BREED**

German Shepherd

**RADIOGRAPHIC DIAGNOSIS**

- Polyostotic osteoproliferative osteopathy of the distal left hind limb with regional soft tissue swelling.
- Mixed cranioventral interstitial alveolar lung pattern
- Atelectasis of the left lung - likely due to prior positioning of the patient in left lateral recumbent position.
- Multiple thoracic spondyloses.

**SEX**

FS

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The radiographic findings of the left hind paw are highly suggestive for hypertrophic osteopathy/Marie's disease which is a polyostotic osteoproliferative disorder that is typically secondary to intrathoracic or intraabdominal pathology. Pulmonary or other thoracic neoplasia has been described to cause hypertrophic osteopathy most commonly. However, other intrathoracic disease and abdominal mass effects can occur concurrently or causatively as well. The osteoproliferative changes have a preponderance for the distal long bones and typically they appear in more than one limb. Radiographing the right hind paw or the front paws could be considered. Other differentials for the changes in the hind paw would include regional infection with periostitis and cellulitis but this is thought by far less likely.

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The findings of the lung suggest presence of bronchitis / bronchopneumonia such as infectious or eosinophilic / allergic bronchopneumopathy. Atypical presentation of neoplasia including metastatic disease cannot be ruled out entirely but is thought by far less likely based on the radiographic presentation. Consider a clinical trial of treatment for bronchitis/ bronchopneumonia with clinical and radiographic monitoring as well as symptomatic treatment and/or sampling of the findings of the left hind paw.

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Abdominal ultrasound could be considered in order to screen for other potential primary neoplasia/mass effect.

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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.

**Nele Eley**, DVM, Dr. med. vet., DipECVDI  
European Specialist in Veterinary Diagnostic Imaging, Cert. Radiology,  
Senior lecturer University of Giessen, Germany, Veterinary Faculty, Department of Radiology  
Nele.Eley@sonopath.com