

*Radiographic Impressions:* Lateral, craniocaudal and left hind limb adducted views are presented for interpretation. There is permeative bone lysis at the proximal metaphysis of the left femur. There is a long zone of transition from abnormal to normal bone. There is amorphous periosteal new bone on the cranial and caudal cortices of the proximal metaphysis. The cranial cortex is thin. There is a 6 mm, linear, mineral opacity extending from the cranial cortex.

*Radiographic Summary:* Permeative osteolysis and amorphous periosteal new bone of the proximal, left, femoral metaphysis.

*Differential Diagnosis:* 1. Primary Neoplasia 2. Fungal Osteomyelitis

*Case Follow Up:* A pulmonary metastasis check was performed. No pulmonary nodules were identified. A presumptive diagnosis of osteosarcoma was made, without a bone biopsy, which would be definitive. The owners had declined any further diagnostics. They decided not to amputate the limb. They did choose palliative therapy, which was a combination of carboplatin and pamidronate.