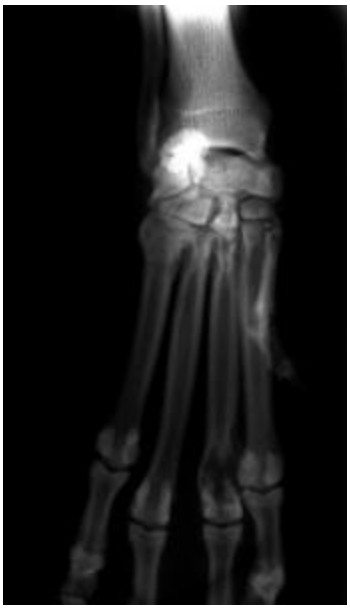
VETERINARY SURGICAL SPECIALISTS

CASE IN POINT
Appendicular Metacarpal Osteosarcoma

PRESENTATION: 10 year MN Labrador mix presented for a right forelimb lameness.
HISTORY: The patient fractured the right 3rd metacarpal 6 months prior and it was managed with a splint. Radiographs revealed poor bone quality in addition to the fracture and it did not heal well. Bone biopsy of the affected region revealed necrotic and reactive bone with fibroplasia. The paw remained painful and infection complicated recovery.
PHYSICAL EXAMINATION: A non-weight bearing right forelimb lameness was noted with pain and swelling in the metacarpal region but no evidence of draining tracts.
DIAGNOSIS: Thoracic radiographs, abdominal ultrasound and bone scan revealed no evidence of lung, abdominal or bony metastasis respectively. CBC and chemistry profile was normal.



TREATMENT: Amputation of the affected distal portion of the metacarpal and a portion of P1 was performed without complication. The limb was bandaged and splinted for 14 days.
OUTCOME: Postoperatively, the swelling and lameness resolved. Histopathologic analysis revealed a completely excised osteosarcoma.
DISCUSSION:
Osteosarcoma is the most common form of primary bone cancer, however the distal radius is the most common forelimb location. With amputation alone, the median survival time is 6 months, and metastasis occurs at a high rate. Cisplatin chemotherapy results in 50% survival for 1 year, 25% for 2 years and 10% for 3 years. All patients eventually succumb to metastasis to the lungs, liver, bone or brain. A study from Colorado State University indicated that survival of dogs with OSA distal to the carpus or tarsus was somewhat longer than more common sites, however they still should be considered aggressive with a high metastatic potential.