HISTORY AND SIGNALMENT

- 9 year old, male neutered, Springer Spaniel
- Presented to UGA Veterinary Teaching Hospital for left forelimb lameness and a mass on left proximal forelimb
- Bacterial and fungal cultures were negative, and initial cytology was inconclusive
- Radiographs revealed a lytic bone lesion over proximal humerus
LEFT EXTREMITY, 
CAUDOCRANIAL VIEW
LEFT EXTREMITY, LATERAL VIEW
HISTORY AND SIGNALMENT

- Increased swelling was noticed several weeks after initial evaluation
- A soft tissue biopsy was submitted
  - Diagnosis indicated amputation
- The amputated limb was submitted to confirm the diagnosis.
AMPUTATED LIMB: GROSS FINDINGS

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MORPHOLOGIC DIAGNOSIS

- Left thoracic limb mass: Rhabdomyosarcoma, completely excised
  - Results support initial diagnosis from soft tissue biopsy
- The mass was >2cm from surgical margin
- Vascular invasion could not be ruled out
Rhabdomyosarcoma

- Relatively rare in domestic animals
- Extremely variable in gross and cellular morphology, histologic presentation, and age of onset
- Embryonal, alveolar, and pleomorphic subclasses
- This case’s morphology is most consistent with embryonal-type rhabdomyosarcoma.
EMBRYONAL RHABDOMYOSARCOMA

- Cells widely variable in morphology
  - Round, immature, myoblastic cells with eosinophilic cytoplasm
  - Multinucleated, myotubular cells that resemble developing skeletal muscle

- Predisposing factors
  - Age – most cases reported in dogs <2 years of age

- Prognosis
  - Depends on severity and extent of invasion and evidence of metastasis at time of diagnosis.

- Metastasis rate
  - Moderate to high
FOLLOW-UP

- Dog returned to the clinic 3 weeks after amputation, reluctant to stand, not eating or drinking, with a painful, distended abdomen
- Ultrasound revealed multifocal, diffusely hypoechoic lesions on liver and spleen
- Hypercalcemia and hyperlactatemia
- Metastatic disease was suspected
- Final resolution lost to follow-up

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REFERENCES


QUESTIONS?

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