

## Malignant Peripheral Nerve Sheath Tumor at Elbow Joint with Lung Metastasis in a Dog

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**Signalment:** A 6-year-old female Shih-tzu dog weighting 5.8 kg was presented with left elbow joint mass (5 x 5 cm). Clinical signs included the left forelimb lameness with decreased elbow joint range of motion.

**Results:** Ultrasonography demonstrated encapsulated hyperechoic masses around the left elbow joint and clinicopathologic examination revealed neoplastic cells from the mass. Prior to surgical excision, the patient was initially treated with prednisolone as a palliative treatment, however effective alleviation was not achieved. It was decided that amputation of the left fore limb with scapula when the mass was gradually increased and measured approximately 7 x 8 cm in diameter. It took 18 months for owner to make a decision of surgery from first recognition of mass. Postoperative histopathological examination diagnosed the mass as a malignant Schwannoma.

The first recurrence was detected after a postoperative period of 5 months on the primary region and other two separated cutaneous regions. Cytology from the FNA revealed mesenchymal origin tumor cells with malignant appearance. These were eliminated surgically. We then confirmed that the recurrence was related with initial lesion from the pathological findings. Chest radiography suggested lung nodule with the possibility of metastasis. The patient has been treated with chemotherapy using 10 mg/m<sup>2</sup> cyclophosphamide and 0.3 mg/kg piroxicam, PO, sid.

**Clinical relevance:** Canine malignant Schwannoma followed by lung metastasis is an unusual case. The initial accurate diagnosis and active treatment are essential. The treatment of peripheral nerve sheath tumor is an extensive surgical excision and several antitumor therapies, however the recurrence is frequent.

**Key words:** canine, schwannoma, peripheral nerve sheath tumor, metastasis

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