What is your diagnosis? Answer

Cervical pain and paresis of left thoracic limb in a chondrodystrophic dog.

Discussion
On the left side of the myelogram (Fig. 2), at the level of mid C6, a ‘golf tee’ sign could be seen, indicating an extramedullary, intradural mass lesion (1, 2). Combined with the clinical examination, the most probable diagnosis was an intradural tumour located on the left side of the spinal cord at C6.

Necropsy revealed a homogeneous mass over the normal spinal cord tissue, different in colour and in surface texture from the nerve tissue. This oval-shaped mass extended towards the left intervertebral foramina and the nerve root. Histopathology of the mass demonstrated the presence of tumour cells with moderate to high anaplasia, and numerous mitotic figures in some areas, together with evidence of invasion of the spinal cord (Fig. 3). Based on these findings, a malignant nerve sheath tumour was diagnosed.

As it is impossible to determine the origin of these tumours, neoplasms growing within nerve sheath are in most cases classified into one of several categories of peripheral nerve sheath tumours. These categories include lesions derived from Schwann cells, perineural fibroblasts, and from other cells. This is reflected in the complex nomenclature of these tumours, which are referred to as neurogenic sarcoma, malignant Schwannoma, malignant neurolemmoma, or neurofibrosarcoma (3). There are only few cases in the literature that described nerve sheath tumour in the West Highland White Terrier (4,5).

Diagnosis
Nerve sheath tumor in West Highland White Terrier

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Fig. 2 Ventro-dorsal myelogram revealed pooling of the contrast agent at C6 with a ‘golf tee’ pattern on the left side of the spinal cord at C6.

Fig. 3 Dorsal view of the pathology specimen. Note the oval mass compressing the left side of spinal cord, prolonged to the left root nerves.

References