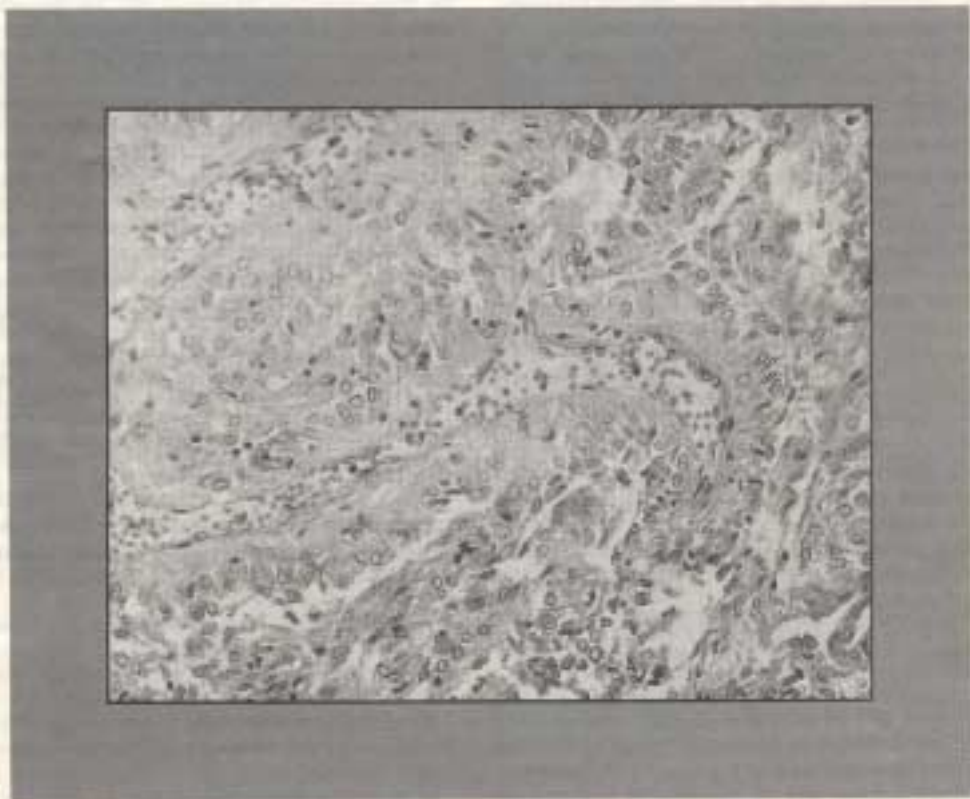




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Papillary Meningioma in the Caudal Fossa of a Dog

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A 10-year-old male Catalan Shepherd dog was presented with signs consistent with a left central vestibular syndrome that had been progressing for 1 month prior to presentation. Magnetic resonance imaging (MRI) demonstrated a mass in the caudal fossa compressing the left side of the brain stem and clearly distorting the medulla. Histopathological and immunocytochemical studies classified the tumor as a papillary meningioma. Clinical findings, histopathology, and immunocytochemistry of this rare variety of meningioma are discussed. To our knowledge there is only one previous report of this type of tumor in a dog.

Key Words: Dog, brain, meningioma, magnetic-resonance, histopathology

Introduction

Meningiomas are mesenchymal tumors, usually benign, that arise from meningeal, mainly arachnoid, cells.¹ They are common in humans; quite frequent in dogs and cats; and rare in cows, sheep, and horses.^{2,3} They constitute the most common type of central nervous system (CNS) tumor in dogs⁴ and they present as solitary tumors which grow slowly, producing pressure atrophy.⁵ Affected animals are adult dogs without sex or breed predilection.⁶

The histologic classification of canine meningiomas^{2,7-9} is adapted from a classification of meningiomas in humans.¹ A recent revision carried out by the World Health Organization (WHO, 1993) recognizes 11 subtypes of benign meningiomas, an atypical meningioma, a papillary meningioma, and an anaplastic/malignant meningioma.¹⁰

In this case report, we describe the clinical history and the pathologic findings in a dog with a meningioma which showed proliferative areas with a papillary growth pattern.

Case Report

A 10-year-old male Catalan Shepherd dog was referred to the clinic for a possible vestibular syndrome.

The dog had previously suffered circling episodes and a left head tilt that had been progressing for 1 month. Some days prior to presentation the animal stopped barking and had difficulties swallowing. The neurologic examination revealed several abnormalities, namely lethargy, a left head tilt, bilateral mydriasis with absent pupillary light responses and postural reaction deficits in all four limbs but worse on the left side. A central vestibular syndrome was diagnosed and a magnetic resonance imaging (MRI) of the head was performed under propofol anesthesia (5 mg/kg IV bolus injection followed by 0.4 mg/kg/minute IV maintenance infusion). Coronal and axial contiguous 5-mm thick scans were obtained. The transverse views showed the presence of a space-occupying lesion in the caudal fossa that affected the left side of the brain stem and extended from the mesencephalon to the myelencephalon, distorting the medulla (Fig. 1). On the more caudal views, the lesion had a homogeneous appearance and was clearly distinct from the adjacent nervous tissue. T2 images were not obtained because of the deep respiratory depression that the animal developed during anesthesia.

A palliative medical treatment with prednisone (1 mg/kg/day) was initiated. The dog's condition improved and a good quality of life was obtained and maintained for 2 weeks. When the prednisone dose was reduced,

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