



CASE OF INTEREST

Orbital meningioma in the dog.

By: Judith Hargreaves, Veterinary Pathologist.

Orbital meningioma is a classical but essentially uncommon retrobulbar lesion in the dog. There are only very rare reports in other species. In dogs only 3% of meningiomas arise in the orbit, 82% arise intracranially and 15% are intraspinal. The tumour arises from the meninges around the optic nerve.

The clinical presentation usually includes exophthalmos and orbital swelling and may include papilledema or abnormalities of the posterior segment. A high proportion of dogs are blind in the affected eye.

Grossly these tumours form masses encircling the optic nerve and tightly adherent to the globe (figure 1). Histologically the tumour is characterised by bundles and whorls of spindle cells often interspersed with immature bone or cartilage. The bone may be detected radiologically in some cases (figure 2). These tumours are locally invasive and may recur following attempts at surgical excision (5/16 in one study*) however there are only rare reports of pulmonary metastasis. Tumours may invade the bone of the orbit and rarely the globe itself (figure 3), but enucleation with excisional biopsy is often curative.

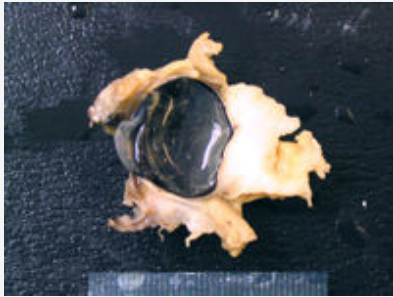


Figure 1. Gross appearance of the formalin fixed specimen longitudinally sectioned (tumor mass encircled) (click to enlarge)

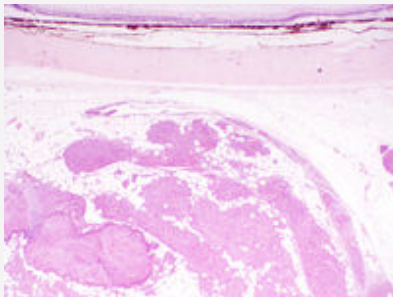


Figure 2. Histological section of the globe (retrobulbar view) indicating the location of the neoplasm and its association with the globe (I-Iris, S-Sclera, N-Neoplasm) H&E obj x10. (click to enlarge)

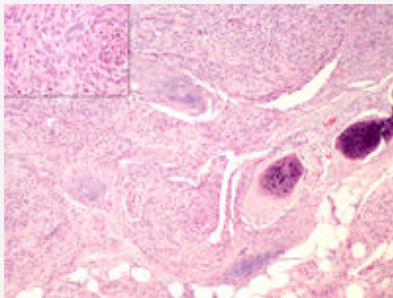


Figure 3. Histologically the tumour is characterised by bundles and whorls of spindle cells often interspersed with immature bone or cartilage. H&E, obj x40. (click to enlarge)

Clinical differential diagnoses for space occupying lesions of the orbit are many and varied. They include orbital cellulitis, other forms of neoplasia, eosinophilic myositis, zygomatic salivary mucocoele, lacrimal cyst and various cranial deformities including craniomandibular osteopathy. Numerous other neoplasms have been recorded including carcinomas arising from the lacrimal or zygomatic salivary glands, sarcomas, lymphoma and mast cell tumour. Most tumours, with the exception of mast cell tumour and lymphoma, are painless until advanced and slow growing, which is in contrast to inflammatory lesions such as cellulitis.

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JOURNAL Reviews(with e-links)

1.PUSTULAR CALICIVIRUS DERMATITIS ON THE ABDOMEN OF TWO CATS FOLLOWING ROUTINE OVARIECTOMY. J Declercq. *Veterinary Dermatology* 2005, 16, 395-400. [Link](#) Trevor Whitbread BSc. BVSc. MRCVS DipECVP

This paper highlights the fact that, in a small number of cases, feline calicivirus can cause significant skin lesions in addition to lesions in the oral cavity. Two cats with severe dermatitis involving surgical skin wounds caused by routine ovariectomy. The lesions consisted of severe erythema and pustulation. In one case, numerous small pustules were present and, in the second case, there were large flaccid pustules present. These lesions extended along the incision line for about 1-2cm either side. The histopathology showed extremely florid panepidermal pustulosis with varying degrees of necrosis. The underlying dermatitis was moderate and by itself rather non-specific. As is usually the case with other calicivirus lesions, there were no inclusion bodies present but virus was identified with immunostaining techniques. The histopathology picture is very striking and it is not a pattern that one would tend to see with other lesions in cat skin. It is much more florid than any other exudative inflammatory process. Only one of these two cats had concurrent lesions in the mouth.

2.CLINICAL, IMMUNOLOGICAL AND HISTOPATHOLOGICAL FINDINGS IN A SUBPOPULATION OF DOGS WITH PODODERMATITIS. RM Breathnach *et al* .*Veterinary Dermatology* 2005, 16, 364-372. [Link](#) Trevor Whitbread BSc. BVSc. MRCVS DipECVP

This paper purports that there is a subset of dogs with pododermatitis to which no specific aetiology can be attached and which do not respond to conventional medical therapy, but which do respond to immunosuppressive treatment. In the twenty cases in this study strenuous efforts were made to exclude other distinct aetiologies. The histological findings were non-specific and could be associated with a wide range of causes, however, the authors propose a histopathological diagnosis of lymphoplasmacytic pododermatitis and suggest a possible immunological aetiology. They concede that there may still be multiple aetiologies and that a larger study is needed. There was no discussion of the possibility of contact allergy in any of these cases.

3.POTENTIAL ROLE OF MULTIPLE RECTAL BIOPSIES IN THE DIAGNOSIS OF EQUINE GRASS SICKNESS. Wales AD, Whitwell KE. *Veterinary Record*, March 18 2006; 158: 372-377. [Link](#)

This paper describes a painstaking investigation into the potential utility of rectal biopsies in the diagnosis of grass sickness – a minimally invasive technique compared to ileal biopsy. It accurately defines diagnostic criteria using routine histological processing and staining techniques. Results were encouraging with a sensitivity of 71% and a specificity of 100%. This post mortem study, however, used carefully controlled samples which were taken with optimal tissue preservation, i.e no crushing. It may be more difficult to reproduce these results in practical situations in live animals. I presume this will be the subject of a future paper by the same authors. **Judith**

*Histopathological and clinical features of orbital meningiomas in dogs, E. Mauldin et al: Vet Pathol; 35(5)p434. abstract.

Related reading: [Waltham/IOU Symposium on Small Animal Oncology 2001.](#)

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LATEST NEWS

Hepatitis in English Springer spaniels in the UK & Norway

Over the past two to four years, a number of young to middle-aged, predominantly female English Springer Spaniels have been presented to veterinary surgeons in both the UK and Norway with sudden-onset jaundice, vomiting and often marked pyrexia. Liver biopsies revealed lesions varying from severe generalised necrosis to more chronic pyogranulomatous inflammation.

The investigating group are employing a joint, fully collaborative approach that includes the involvement of the Kennel Club, as well as the English Springer Spaniel clubs of the UK and Norway. Interestingly, English Springer Spaniels in the UK and Norway are very closely related genetically.

Further Information and contact details:

LETTERS: Penny Watson*, Ellen Skancke, Wenche Farstad, Jeff Sampson, Lesley Bloomfield, and Louise Scott. **Hepatitis in English springer spaniels in the UK and Norway** Vet Rec., Mar 2006; 158: 311.

*Queen's Veterinary School Hospital, University of Cambridge, Madingley Road, Cambridge CB30ES

SIDE STORY

PCR test for mycobacteriosis in mammals and M. bovis to become a notifiable disease in mammals March 27th 2006 in the UK

All potential cases should be reported to the VLA. The VLA is currently willing to undertake mycobacterial culture free of charge in cases where the history, clinical signs and/or histopathological findings are suggestive of mycobacterial infection. [Further Info:](#)

Whilst there is no legal obligation to notify the Divisional Veterinary Manager (DVM) of suspicion of bovine TB in cats and dogs, it is good practice to do so for disease control purposes. However, any person in possession of a carcass affected with or suspected of being affected with tuberculosis, must notify the DVM.

[Costs of PCR as of April 1 2006 : Routine Tb PCR and mycobacterium detection £123+vat; identification of atypical mycobacterium a further £130.50+vat; cost of differentiating members of the tuberculosis complex a further £213+vat].

Further Information:

[VLA Website](#)
[DEFRA TB Order 2006](#)

OUR DETAILS

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Where we are: [Multimap Link](#)

BIOPSY TIPS - Fine needle biopsy

The use of fine needle biopsy (aspirate) should be regarded as only a guide and in only very few circumstances is it definitive.

- With lymph node aspirates a gentle aspiration technique should be used. Too much negative pressure, too rapid release of cells or too much squashing or crushing will rupture cells.
- If the deposit is too thick use some isotonic saline (a few drops) and use the tip of the needle (when the sample is still moist) to homogenise the sample to create a monolayer on the slide when air dried.
- Take more than one sample from throughout the mass/tissue and create multiple slides. Examine a slide after staining to see if the slides are diagnostic before submission.

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