



Issue 2  
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# Veterinary News

## Neurology/Neurosurgery Unit



In order to re-emphasise the Neurology Unit's strong commitment to investigation and management of surgical neurology cases (in addition to the continuing commitment to medical neurology cases) the decision has been made to change the name of the Neurology Unit to the Neurology/Neurosurgery Unit. Spinal, brain and peripheral nerve surgical conditions are presently seen at the Trust and this has been helped greatly by the addition of an on-site 1.5T MRI scanner and a surgical operating microscope.

Presently, spinal conditions such as intervertebral disc disease, lumbosacral disease, cervical spondylomyelopathy or wobbler's disease, fractures and spinal tumours are welcomed as referrals.

Simon Platt has recently joined the team, which already includes Jacques Penderis and Laurent Garosi. Simon qualified from the University of Edinburgh in 1992 and subsequently completed an internship in small animal

medicine and surgery at the University of Guelph in Canada. After a 2 year period in small animal practice in England, he went to the University of Florida, College of Veterinary Medicine, for a 3 year neurology/neurosurgery residency. In 1998, Simon moved to the University of Georgia as an assistant professor in small animal neurology and became a Diplomate of the American College of Veterinary Internal Medicine in the specialty of neurology. His research and clinical interests are epilepsy, nervous system trauma and brain tumours.

The Unit will now have one neurologist consulting at all times with a second neurologist covering for emergencies and taking advice calls. This system will ensure efficient patient management which will also benefit the owners and referring veterinarians. Please call (01638) 552700 if you would like to discuss a neurology case with one of the clinicians. If they cannot take your call immediately, they will call you back on the same day.

The AHT will be offering a series of neurology CPD courses in 2001, with a weekend course planned for 3rd and 4th February. Topics that will be addressed in this interactive course will include emergencies in neurology, anticonvulsant drugs and nervous system imaging. For further details, please contact Karen Bond on 01638 552700.

## 4th World Congress for Veterinary Dermatology

This event was held in the wonderful venue of San Francisco and was a very special meeting. The programme included state of the art lectures, supporting papers, clinical programme, free communications, posters and social events. The audience had an even greater range of international participation than previous congresses, particularly from Asia and the Pacific.

The work of the Dermatology Unit at the Animal Health Trust was represented by Dr Littlewood (Head of Unit) speaking in the Equine Clinical Programme on skin diseases affecting the lower limbs of horses and presenting a paper for Japanese delegates on the recognition and treatment of bacterial skin disease in the dog.

The results of a collaborative research project comparing the results of intradermal skin testing with a serum allergy test (Heska Allercept™) in a cohort of suspected atopic dogs seen at the AHT and at the University of Bristol Veterinary School, Langford was presented. The analysis of these results has involved colleagues in the Epidemiology Unit at the Trust and the fruits of all these efforts will be published in the scientific literature in due course.

Animal Health Trust  
Lanwades Park  
Kentford  
Newmarket  
Suffolk  
CB8 7UU

Telephone: 01638 751000  
Fax: 01638 750410  
e-mail: [info@ah.org.uk](mailto:info@ah.org.uk)  
Web site: [www.ah.org.uk](http://www.ah.org.uk)

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# The essential role of our intensive care team



*Intensive care is not a service we have previously publicised at the Animal Health Trust and some of you may be unaware of the facilities available for patient care. We do not regard intensive care as a separate entity in the care of the animals – rather it is an extension of the high quality care that all patients receive. Clients are charged an extra fee when the condition of their animal is sufficiently unstable that it requires one-to-one continuous nursing and observation, in addition to the 24 hour care provided by the nurses responsible for all patients.*

Although the anaesthesia service is responsible for the majority of intensive care (such as fluid therapy, monitoring, oxygen supplementation and pain relief), at this level care is provided by a team approach. The nurses have input into the nutritional support and general nursing, and the primary clinician takes responsibility for specific problems, eg wound care, drain care, antibiotics. Each case in intensive care is assessed by the team at least twice daily, so that changes can be made in response to the condition of the animal.

In terms of physical facilities, intensive care takes place within the wards area unless mechanical ventilation is required in which case a separate room is used. Five kennels have a supply of piped oxygen and there is an incubator for small dogs and cats which can have an oxygen supply. Oxygen supplementation may range from a mask, to nasal oxygen catheters, to mechanical ventilation with oxygen and air in cases with severe head injury or pulmonary pathology. In addition to simple supplementation, the oxygen can be humidified or nebulisation can be provided for chest physiotherapy or drug administration.

For recumbent animals, water beds are used to prevent pressure sores developing and a visiting physiotherapist advises on physical treatment of these patients.

Nutritional support is provided for all animals in the kennels depending on their requirements. If there is no voluntary intake, nasogastric tubes or gastrostomy tubes are placed. For cats, an enteral feeding pump is available or simple syringe drivers are used. If enteral feeding is inappropriate, total parenteral nutrition is given.

The following case is a typical example of a patient who benefited from intensive nursing during the immediate post operative period.

Boris is an 8 year old Akita who was presented for assessment of a chondrosarcoma arising from the left 10th costochondral junction. Boris underwent a thoracic wall resection; an *en bloc* excision of the ventral half of ribs 9, 10 and 11 was performed. The resulting defect was closed using prolene mesh in combination with a *latissimus dorsi* muscle flap. A thoracostomy tube was placed during closure of the thorax and a urinary catheter was placed at the end of surgery.

Boris was recovered on a water bed with warming from an infra-red lamp. Initial monitoring included constant observation of the electrocardiogram (using a telemetric ECG unit), pulse oximetry, respiratory rate and effort. Non-invasive blood pressure was assessed every hour along with assessment of temperature, pulse, central venous pressure and urine output. The chest tube was drained every hour initially. After 4 h, the air collection was zero and fluid collection had decreased to 75ml/h.

After the first 4 h, the frequency of these measurements was decreased to every 2 h, although Boris was still under constant supervision. Our routine night nurse was assisted by the intern on duty. Frequent phone-calls were made to the anaesthetist on duty for advice.

Pleural fluid production and urine output were measured to allow fluid intake and output to be assessed, and the iv fluid rate to be adjusted accordingly. Packed cell volume and total protein (PCV/TP) were assessed every 6 h to help assess hydration, blood loss or protein loss. Colloids were added to the iv fluid therapy when the total protein was found to be low (3 g/dl).

Analgesia was provided by a morphine infusion at a rate that provided comfort without respiratory depression. A small infusion pump ensured consistent delivery of the morphine. Bupivacaine was administered intrapleurally every 6 h via the chest tube (after drainage).

During the following day, Boris became more alert and active. He began to eat and drink well on his own. The following afternoon, the ECG unit was removed and blood pressure monitoring discontinued. Frequency of monitoring and thoracic drainage was reduced to every 4 h, then to every 6 h. The intern stayed on site for the second night in case of problems with the chest tube.

Monitoring on the third and fourth post operative days was performed every 6 h. Urine output and PCV/TP measurement were continued until the pleural effusion had resolved. The pleural fluid production decreased gradually and we were able to remove the chest tube 4 days post operatively. Boris continued to do well over the following 2 days and was discharged 6 days after surgery. He returned for a check-up after one month and the surgery site was healing well. Confirmation of chondrosarcoma with complete margins of excision carries an average survival time of 3 years.



# The development of feline medicine at the AHT

From September, the AHT will launch a new feline internal medicine referral service headed by Dr Andy Sparkes.

Feline referrals have always formed an important part of the clinical work undertaken at the Trust, but this is a new initiative that will, for the first time, offer a full referral service in feline internal medicine. This is a natural progression of the clinical work already undertaken, but it is also a recognition of the increasing importance and popularity of the domestic cat as a companion animal.

One important aspect of the new enterprise will be the integration of clinical referral work with clinical research. This will draw particularly on existing research strengths at the Trust, such as epidemiology and genetics, to tackle some of the important and common conditions that affect cats. From time to time, requests will be made for referral of particular types of cases, to progress our understanding of specific feline diseases, but referrals of any nature can be made at all times.

For further information, or to make a referral appointment, please contact Dr Andy Sparkes on 01638 552700.

## AHT Referral Clinics – Veterinary Questionnaire

We would like to thank the many of you who responded to our veterinary questionnaire, the overwhelmingly positive response was very gratifying and it is good to know that, for the most part, we are providing a key service for colleagues in general practice. We are equally grateful for the constructive criticism received from some of you. This is extremely helpful to the future administration, planning and organisation of the small animal and equine clinics.

In order to minimise costs, the questionnaire accompanied the last issue of 'Veterinary News' sent to practices in East Anglia and the Home Counties only. Of the 500 practices selected, 27% completed and returned the questionnaire within the allotted time and the results are summarised below:

- 92% were familiar with the work of the Animal Health Trust;
- 89% have referred a case to us, 59% do so on a regular basis;
- 67% felt that cost of referral was not the major consideration; more important issues being those of previous good experience with the chosen referral centre, the approachability of its clinicians, the facilities and support services offered and the waiting time for an appointment;
- 99% considered that, overall, they were satisfied with the services offered by the Trust's referral clinics;
- 69% would welcome an opportunity to visit our clinics were we to arrange a veterinary open day (as a result, it is our intention to run an Open Day during May 2001);
- 83% would be interested in attending CPD courses at the AHT (please see our updated programme on page 4).

## Prevalence of cardiac valvular regurgitation in National Hunt Thoroughbreds in training

Murmurs associated with atrioventricular valve regurgitation are commonly detected in racehorses, but their significance to athletic performance has not yet been determined. With the use of very advanced colour flow Doppler cardiac imaging equipment, specialists at the AHT are pursuing a large scale epidemiological study



in an effort to see whether murmurs affect athletic performance, whether they progress, and how the heart adapts to training. This project is funded by the AHT and the Horserace Betting Levy Board and supported by local vets and at least 6 large training yards and 2 commercial breeding establishments. The trainers allow us to examine all the horses in their yards, both flat yards and National Hunt yards are involved. Although the work concentrates on racehorses, it is equally relevant to all horses. Racehorses, who work at the peak of the heart's reserve are most likely to be affected by any subtle problems. They are also kept in very large numbers under standard management allowing a useful epidemiological study to take place.

Interim data from this project has shown that the prevalence of cardiac murmurs is higher in race-fit national hunt horses than was previously reported. We have also shown that athletic training increases the prevalence and severity of regurgitation in older jumping Thoroughbreds as well as young flat racing Thoroughbreds. Hopefully the high prevalence of the condition should allow us to determine the effect of valvular regurgitation on athletic performance in horses at the conclusion of this epidemiological study.

## CPD Courses

- **10th October 2000**  
*The team approach to thoracic surgery*  
Jackie Brearley: Head, Anaesthesia  
Prue Neath: Head, Soft-Tissue Surgery
- **7th November 2000**  
*Thoracic imaging*  
Ruth Dennis: Head, Imaging
- **12th December 2000**  
*Update on management of seizures*  
Laurent Garosi: Clinical Neurologist
- **9th January 2001**  
*Update on mast cell tumours*  
Sue Murphy: Marcus Resident in  
Veterinary Oncology
- **11th January 2001**  
*Evaluating the neurological patient & lesion localisation*  
Simon Platt: Head, Neurology
- **13th February 2001**  
*Feline medicine*  
Andy Sparkes: Head, Feline Internal Medicine
- **13th March 2001**  
*Dermatology*  
Janet Littlewood: Head, Dermatology
- **15th March 2001**  
*Spinal cord disease*  
Laurent Garosi: Clinical Neurologist
- **17th May 2001**  
*Strokes and funny turns? Understanding and investigating vestibular and cerebellar disease*  
Jacques Penderis: Clinical Neurologist
- **19th July 2001**  
*Working-up the weak: peripheral nerve and muscle disease*  
Simon Platt: Head, Neurology
- **6th September 2001**  
*Diseases of the brain: practical investigation techniques and when to refer disease*  
Jacques Penderis: Clinical Neurologist
- **8th November 2001**  
*Seizure therapy*  
Laurent Garosi: Clinical Neurologist

Please contact Karen Bond on 01638 552700 for further information

## NURSES CLUB PROGRAMME

- **Monday 15th January 2001**  
ANIMAL BEHAVIOUR  
Peter Neville: Animal Behaviouralist
- **Tuesday 20th March 2001**  
NEUROLOGY  
Laurent Garosi: Clinical Neurologist
- **Wednesday 23rd May 2001**  
PORTFOLIO SESSION  
or CLINICAL ROUNDS (to be confirmed)
- **Thursday 26th July 2001**  
CRITICAL CARE  
Dr Jackie Brearley: Head, Anaesthesia
- **Monday 24th September 2001**  
DENTISTRY  
John Robinson BDS: Veterinary Dentistry
- **Thursday 22nd November 2001**  
OPHTHALMOLOGY  
Jane Sansom: Head, Ophthalmology

Please phone Katie Collard VN on 01638 552722 for further information.

# Dog lymphoma – one lump or two?



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Lymphoma is the most common, life-threatening neoplasm of dogs, comprising approximately 20% of all canine malignancies. Knowledge of the pathogenesis of lymphoma in dogs is incomplete. Great strides have been made over the past decade using chemotherapy to prolong the length and quality of an affected dog's life. Twenty years ago, the diagnosis of lymphoma in people was almost invariably fatal. However, with the development of improved means to sub-classify this neoplasm and the tailoring of therapies that are subtype-specific, more and more forms of human lymphoma are treatable. In human medicine, many forms of lymphoma are now characterised by the presence of recurrent chromosome aberrations that are used in the diagnosis and prognosis of the sub-types. The detection of such abnormalities has been aided significantly by the use of modern molecular cytogenetic technology.

### Your help is invited

The Genetics Research Section at the Animal Health Trust is running an ongoing project to define recurrent chromosome aberrations associated with canine lymphoma and to investigate any correlation with the clinical course of the disease.

Identification of specific chromosome aberrations will also help to investigate the correlation between the genetic aetiologies in dogs with those in people. This approach offers a potential means to sub-divide this diverse disease in dogs, thereby offering new information for diagnosis, prognosis and therapy. In order to maximise the benefit of this study we need to study a large cross section of lymphoma cases and are therefore requesting your help. Should your practice see any case of suspected generalised lymphoma at any time, we would be delighted if you would ring Dr Matthew Breen or Dr Rachael Thomas from the Genetics Section, to discuss whether the case may be suitable for inclusion in the study. Matthew or Rachael can be contacted on 01638 750659.

### What do we need?

We require 2 pieces of tissue from each biopsy, collect **before** chemotherapy or steroid treatment has been initiated. One should be formalin fixed and the second should be fresh tumour tissue (a minimum 5 mm<sup>3</sup> section or equivalent). The unfixed biopsy material for this study **must** be collected aseptically in a sterile container of medium (**not formalin**). If your practice is interested in helping us with this project, please contact us directly and we will supply you with collection containers containing suitable medium, which may be stored for future cases as they arise. It is important for this study that we are provided with accurate details of the age, sex and breed of each animal and, should a case prove to be of research interest, we may contact you for further clinical details at a later date.

The routine pathology will be performed by the Animal Health Trust Diagnostic Laboratory Services. In return for your help in providing the samples we will perform, **free of charge**, immunophenotyping of confirmed lymphomas. Immunophenotyping is recommended for all cases since it may be of prognostic value and aid in client education and planning of treatment. Generally, lymphoma of B cell origin has a better prognosis than that of T cell origin. Therefore, immunophenotyping is likely to be of practical value to you in the management of your cases. For all submitted cases, please indicate that you are responding to the '**Cytogenetics Lymphoma Project**' on the submission form.

**Thank you for your consideration of this matter**

The Animal Health Trust is grateful to Merial Animal Health Ltd  
for distributing this Newsletter