

Vet School



IN THE EVER-CHANGING AND ADVANCING FIELD OF VETERINARY MEDICINE, HOW CAN YOU BE SURE YOUR VET HAS UP-TO-DATE LEARNING AND IS KEEPING UP WITH THE LATEST TECHNIQUES? RICHARD HILL WENT TO THE VETERINARY PRACTICE READERS UPDATE TO FIND OUT WHAT'S NEW.

Your vet is probably constantly bombarded with a stream of promotional literature from commercial organisations such as dog food or drug manufacturers. He or she will be a member of at least one professional body and will receive regular papers from that source. It is also likely that your vet will receive, or subscribe to, specialist veterinary periodicals. One such periodical is the monthly *Veterinary Practice* magazine distributed to over ten thousand veterinary practices per month.

Each year, *Veterinary Practice* hosts a Readers Update - a series of lectures and exhibitions demonstrating and discussing the very latest developments and drugs, techniques and technology

Each year vets meet to learn about and discuss the new drugs and practices available.

in the small animal veterinary science field.

Conferences such as this are considered part of a Continuing Professional Development (CPD) programme, which aims to keep your vet full up-to-date. Speaking at this year's *Veterinary Practice* Readers Update were a number of speakers whose specialities included the dog. There were speakers specialising in allergies, such as Mike Davies on the effect of diet and nutrition on allergies, and Trixie Williams who looked at a



Venue of the Veterinary Practice Readers Update - The Royal College of Surgeons, London.

range of complimentary therapies that could be effective. Geoff Lane spoke in depth on ear problems and surgical techniques for correcting such problems.

Here we look in detail at the papers given by Professor David Bennett on Arthritis in Older Dogs, Sarah Heath on Fears and Phobias in Dogs, and Jos Belgrave who looked at ways in which technology has moved forward in creating

invaluable desktop resources for the veterinary practitioner.

ARTHRITIS IN OLDER DOGS

Professor David Bennett, founder of the British Veterinary Orthopaedic Association, is a specialist in canine arthritis and gave a lecture on Arthritis in the Aged Dog.

Arthritis is the inflammation in a

joint, and there are two main types: degenerative and inflammatory. David concentrated on the degenerative form of arthritis, osteoarthritis. 'Osteoarthritis in the older dog is very difficult to define,' he explained. 'In fact some people say it's not a disease but that it is equivalent to heart failure. It is the end result of joint failure. If we do say it's a disease then we say it's a degenerative condition of moveable



Sarah Heath explains what happens when a puppy is confronted by an unknown object - a plastic squeaky cabbage.

joints characterised by loss of cartilage and by the formation of new bone at the articulator (the joint).

can be a problem. An older dog should be carefully assessed before using these drugs.

Professor Bennett believes that

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'Osteoarthritis is the body's attempt to cope with the unpleasant disease. Hip dysplasia is another example - when the dog is young the hip joints don't fit well but when osteoarthritis has taken place, eight years later the joint fits better - but the dog is very arthritic. Soft tissue changes take place too when the soft tissue becomes inflamed. Inflammation is another component and an important source of pain to the animal in osteoarthritis.'

Osteoarthritis is generally slowly progressive and, although it may be initiated early in life, it most often produces clinical signs in the older dog as its effect becomes more severe. Osteoarthritis can result in both a painful and a mechanical lameness.

Treatment is considered a challenge to vets since, at present, there are no truly disease-modifying drugs. Many arthritic dogs are overweight and losing weight can be an enormous help. Regular exercise, the amount depending on the clinical problem, is essential. Non-steroidal anti-inflammatory drugs are widely used to help reduce pain, but side-effects

recent studies on the pathogenesis of osteoarthritis may offer novel features in the near future, and is himself currently researching new techniques such as gene therapy which he sees as a real step forward in the treatment of arthritis in older dogs.

FEARS AND PHOBIAS IN DOGS

Sarah Heath is Veterinary Officer to the Association of Pet Behaviour Counsellors. She spoke about what can be done about the fears and phobias in dogs, those dogs 'that do not act appropriately to the stimuli with which they are confronted.'

Sarah believes that of all the behavioural problems encountered by dog owners, fears and phobias can be some of the most distressing and the fact that they can so easily be prevented makes them all the more tragic.

Sarah's presentation looked closely at the development of fears and phobias and at the ways in which vets can play a vital role in their prevention. She went on to



Sarah Heath talked about fear and phobias in dogs, which often have their root causes in puppyhood, a puppy's crucial period of learning.

describe the most common causes behind such problems, which often have their roots in the first few months of puppyhood. She described, from the dog's point of view, the way that submissive patterns of behaviour, caused by fear, can often evolve into signs of overt aggressive behaviour. She described the scenario of a nervous dog, with nowhere else to go, being approached by a human.

'If you're fearful of a situation,' said Sarah, 'you show a snarl and a growl and the person advancing often retreats. The dog has learnt

Sarah explained that by the time these cases are usually presented at the vet's surgery, prevention is no longer an option, and went on to outline the approach to managing such cases and the role of therapy and pharmacological intervention as an alternative to a lethal injection, so often considered the only option.

She had a clear point for the delegates: 'You can see how easily these problems can escalate and then get missed, often with fatal consequences for the dog.'

Before long, new drugs will be

Sarah Heath discussed the role of therapy and pharmacological intervention as an alternative to a lethal injection.

that growling and snarling is an effective way of keeping people away from you. The next time someone approaches who's a little more confident with dogs, and doesn't take any notice of the growls and snarls, the dog begins to wonder why this strategy no longer works. What if the next person who arrives is even more confident with dogs? (The vet who thinks, I am going to vaccinate this dog by lunchtime.) What happens is, it growls and snarls and snaps the air, which is all it really wants to do. It's saying, 'please don't come any nearer,' but the person gets nearer and nearer and the snap of the air becomes a snap of the hand. Before long, the dog is learning that it has to become more and more overtly aggressive to make people stay away.'

licensed for use in general vet practice. Sarah went into a comparative analysis of the drugs, and their physiological and pharmacological effects on the dog. In summary she reinforced the message that many of these fears and phobias have humble beginnings, and that it may well be possible to correct an animal's behaviour through the careful use of drugs and behavioural therapy.

'I don't want these sorts of products to be used,' she told the delegates, 'without some kind of knowledge of the need for behavioural modification in conjunction with a pharmacological preparation.'

'They need to be used in conjunction with one another, and then only once an accurate diagnosis has been made.'



Jos Belgrave, speaking on *The Keyboard as a Diagnostic Tool*, explains some of the Internet based services. Here he displays the Cyberpet Veterinary Hospital at the Ohio State University website.

THE KEYBOARD AS A DIAGNOSTIC TOOL

Your vet's diagnosis may soon be supported by a computer sitting in the surgery. It's already happening in some places. But why?

Unlike your doctor, your vet has a large range of species to understand, all of which can be subject to a wide range of diseases and illnesses, each with their own range of symptoms. Also, you need to be confident that your vet has access to the very latest information concerning your breed, and that he or she has full and easy access to your dog's personal history.

Jos Belgrave is a veterinary

practitioner of veterinary medicine. 'The first element of a diagnosis process is recognition and observation,' said Jos, but added, 'this is an area where the keyboard is a fairly poor performer.' What the computer does is process the result of observations, records and other information sources. 'There is no doubt that computers are better at handling facts than we are,' believes Jos.

Jos described a number of systems where computers can be used effectively to aid diagnosis. 'Websites are an interesting developing area for veterinary surgeons' he said. He gave an example of a website at Ohio State University which has a Cyberpet Veterinary Hospital. 'This is focused

He gave an example of a website at Ohio State University which has a Cyberpet Veterinary Hospital. 'This is focused really on students,' he said. 'It's an interactive teaching aid.'

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Another website cited by Jos is at Cornell University in the US. It has a simple diagnostic tree, where a diagnosis can be entered. The search facility returns a range of possible diseases or illnesses together with a description of each and further references.

Jos described other ways in which the internet was playing an increasingly important role in veterinary practice. He explained e-mail, which could be used to access

second opinions or specialist support reasonably quickly.

Communication need not be limited to the written word. Images such as X-rays and ECG traces can be transmitted and all can be passed on to a specialist for rapid diagnosis. This would not be possible by other means.

Other resources available on the computer are compact disc-based systems, such as Vetstream's own CD-Canis. Such systems bring a new dimension to information retrieval as a series of encyclopaedic multi-media information services. They are designed to provide a vet with instant access to the latest in veterinary science using text, sounds, pictures, video clips and animation. Usually this information is regularly updated. In the case of CD-Canis, a CD update is issued quarterly ensuring that information about the latest treatments, techniques and clinical data is available to the veterinary

practice at the touch of a button.

The vet will make observations of a dog with presenting problems. A decision tree guides him or her to a shortlist of diagnoses. CD-Canis cross-links all related items and topics for easy referencing. There are also real benefits for dog owners through such a system. It is simple for a vet to highlight the condition on screen and explain the therapy programme needed to undertake the right care programme. Notes on conditions and drug data can also be printed off for use in surgery.

From Jos' lecture, it is clear that changes are ahead in many veterinary practices. Your vet is kept up-to-date using the latest technology and, through conferences such as this, your vet can get the latest thinking, news on the latest research and developments. As a result, all our dogs can rest assured that they are getting the very best and the very latest in healthcare. 🐾

