



Veterinary *Pharmacist*

June 2007

FROM THE EDITOR

Dear Reader

Spring is always busy for the VPG, but this year it has been busier than usual, with the welcome introduction of a qualification for veterinary pharmacy field staff. Added to this there is a new veterinary medicine category to think about (POM-V [HP]; see this page) and the annual VPG conference, to be held in June. This will be of interest to old hands and newer qualified colleagues alike. The conference programme includes an important session on farm health planning to support the proposed new medicine category.

I am probably going to ruffle a few feathers (but then what are editorials for if not to stir up a bit of discussion?); I do not think we are doing enough to further relations with vets. We should be taking the initiative rather more than we are so I was particularly pleased to see a contribution from Richard Hammond, associate professor at the School of Veterinary Medicine and Science, University of Nottingham, on this very topic in the conference programme.

In this newsletter, there is a seasonal piece, describing equine worming (pS3), and the usual mix of news and features. Our competition continues to be popular. This time, I am asking readers to send in a photograph of their favourite pet — there will be lots of opportunities to snap Fido or Moggy during the long light-filled summer days!

Finally, as the Royal Pharmaceutical Society's branches will be putting together their programmes for the new session, a reminder that our veterinary pharmacy PowerPoint presentation is available from the VPG secretary at Lambeth. Several branches have taken advantage of this facility and have found it interesting.

Steven Kayne

VMD consults on new category

The Veterinary Medicines Directorate has begun consultation on a new distribution category for veterinary medicines. To be called POM-V(HP), the category will be assigned to those medicines that require an initial diagnosis or identification or a causative organism by a veterinary surgeon but may then be supplied without further vet input. Supply must be made under a "farm health plan" that has been agreed and signed by a vet to be valid for a specified period. The plan must be presented to a vet, pharmacist or suitably qualified person on each occasion that a supply is requested. A number of products currently classified as POM-V are thought likely to be switched to this new category and some POM-VPS products may also be affected.

In suggesting the category the VMD is not only improving farmers' access to vaccines but is also underlining the Government's commitment to farm health plans. The veterinary



Some medicines used to treat cattle may be switched to the new POM-V(HP) category

pharmacy diploma curriculum will be amended to take account of this development.

Education programme expands to field staff

Two candidates from England and two from Scotland sat the first examination for veterinary pharmacy field staff (support staff) at the Royal Pharmaceutical Society's headquarters in Edinburgh on 1 May. The four had completed modules three and four of the veterinary pharmacy diploma, which comprise a one week intensive residential course at Harper Adams University College in Newport, Shropshire. In addition to passing

the exam, the candidates are required to complete a portfolio of work experience and engage in continuing professional development.

Members of the VPG met with the Veterinary Medicines Directorate at the end of May to discuss the course being provided for field staff by the Society within the context of the suitably qualified person requirements associated with selling veterinary medicines.

MRSA cases on the increase in animals

There has been an increase in reports of meticillin-resistant *Staphylococcus aureus* in animals. MRSA was first reported to have been isolated from animals in 1972. Since then, there have been a limited number of other cases recorded. In the past two years there have been reports involving animals in the UK. MRSA has been isolated from companion animals, particularly cats and dogs, but also horses and rabbits.

The British Veterinary Association has warned vets to use sterile gloves, scrub suits and masks during operations to protect animals. MRSA isolates that are indistinguishable

from each other have been recovered from companion animals and humans in contact with them, suggesting that they represent the same strain. It is not known, however, whether MRSA is increasing in prevalence in companion animals in the UK or if animals act as a reservoir of the organism that could pose a risk to man or other animals.

MRSA has been isolated from dairy cows and chickens outside the UK but not in UK farmed livestock. There is no current evidence that food-producing animals in the UK act as a reservoir of infection. More information is available at: www.defra.gov.uk



New degree in Ireland includes veterinary module

The new pharmacy degree programme at University College Cork will produce its first cohort of graduates in June. During the development of the degree syllabus, the staff of the school have strived to be innovative in their teaching methods and teaching focus. One example of this currently being realised is the teaching of a fourth year module dedicated to veterinary pharmacy.

The five-credit module, termed "veterinary pharmacology and therapeutics", consists of 18 one-hour lectures and six four-hour tutorials. Lecture and tutorial topics include not only aspects of pharmacology related to veterinary pharmacy, but also the importance of pharmaceuticals, pharmacy practice and pharmaceutical chemistry in veterinary drug design and development. (Veterinary dispensing legislation and prescription requirements are taught in the third year of the university's BPharm programme.)

Lecturers involved in delivering the course include pharmacologists, academic pharmacists, veterinary surgeons (one of whom is also a pharmacist) and staff of the University College Dublin School of Veterinary Science.

Tutorial sessions have proven to be an excellent opportunity to learn using more informal and interactive methods. Students explore relevant topics encountered between community-based pharmacists, pet owners and their pets and subjects of discussion have included issues arising from the euthanasia of companion animals and the role of the pharmacist, companion animal nutrition, and the development of health management plans for pet owners. A local veterinary product wholesaler kindly donated a comprehensive selection of veterinary pharmaceuticals for use in both companion animals and livestock to the pharmacy school and this proved useful for one tutorial during

which students were able to look at and handle a variety of formulations for small and large animals.

Assessment of the course involves two components: an end-of-year multiple choice examination and an in-class research presentation. For the presentation, students are put into groups of four and each group is given a subject area to research over three weeks. They then present the subject (eg, the treatment of heart failure in companion animals and the role of the pharmacist) to the class and lecturers for discussion. Because this is UCC's first year delivering the veterinary pharmacy module, we have come across instances where improvements can be made for future years. However, I believe the module is one of the most comprehensive and relevant of its kind to undergraduate pharmacy students in the both Ireland and the UK and could be used as a template for other schools of pharmacy in the development of their veterinary pharmacy programmes.

Discussions between academic staff to finalise the content and structure of the module were helped by the excellent skills and training I received while undertaking the Royal Pharmaceutical Society's Diploma in Veterinary Pharmacy during 2005 and 2006. It was an experience I thoroughly enjoyed and I am still reaping the benefits, both from an academic point of view and as a practising locum community pharmacist.

The project I conducted, as part fulfilment of the requirements of the diploma, assessed the veterinary pharmacy content of pharmacy degree programmes throughout the British Isles, Australia and New Zealand and also proved invaluable in helping to shape the content of the UCC veterinary pharmacy module. — J. J. Keating, lecturer of pharmaceutical chemistry, University College Cork

Lyme disease

Lyme disease is on the increase in Scotland. In 1996, three cases were reported compared with 27 in 2000 and 67 in 2005. However, most cases still go unreported. The NHS believes that 2,000 people contract the disease in Great Britain each year.

IN BRIEF

Competition

Send in a high resolution digital photograph of your favourite pet, with its name, age and a suitable caption. There will be a prize for the best. Entries to vetpharmnewsletter@yahoo.co.uk by 15 September 2007.

February 2007 winner The animal pictured in the last newsletter was a Bazadaise. Caroline Bradbury of Davenham, Cheshire, was the only entrant to identify the animal correctly. The breed was originally from France and is well known for its excellent conformation and meat production. It is light boned and good to cross breed.

Ms Bradbury is a clinical pharmacy technician working on the medical decisions unit at Leighton Hospital, Crewe, Cheshire. Outside work she helps on the family beef farm and regularly participates in stock judging competitions.

Her prize was kindly supplied by Murray Farm Care, Dumfries.

50th BSAVA congress held in Birmingham



The BSAVA congress hosted an extensive exhibition featuring all the main veterinary pharmaceutical companies

The British Small Animals Veterinary Association held its 50th annual congress in Birmingham in April. The programme contained a number of parallel sessions on general veterinary health problems, such as worms, as well as more complex conditions

and surgical techniques. A lecture by award winning wild life camera man Simon King kept a large audience enthralled for over an hour.

Further reports from the congress will appear in the next issue of *Veterinary Pharmacist*.

Springtime means worming horses

In spring or summer, horses should be treated for tapeworm. These greyish-white, segmented worms are found in the intestines of horses of all ages. Adult tapeworms in horses continually grow segments containing eggs, which pass on to the pasture in faeces. The eggs are eaten by mites in the grass and tapeworms develop as cysts in the mites, which are then eaten by grazing horses. Tapeworm can cause damage to the small intestine and, if present in large numbers, can cause colic.

Roundworms can also be present in large enough numbers to warrant treatment in the spring. Gastrointestinal parasites have varying migratory phases but the simplest life cycles involve three stages outside the host. Eggs are passed in horse faeces and a first stage larva develops inside the egg, which then hatches. Larvae develop in manure to second- then third-stage larvae. At this stage, the horse becomes reinfected by ingesting larvae while grazing. A heavy roundworm burden can cause poor digestion, loss of condition, diarrhoea and colic.

Worming horses is by no means a straight forward affair. Varied circumstances and management mean that there is no simple answer to suit every situation. In large yards, for example, where there are many horses passing through, there is more danger of worms being introduced and all horses grazing together at the same time are treated with the same wormer. New horses in the yard should be wormed and kept off the pasture for at least 24 hours. In lower risk situations (eg, where the horse population does not change), it may be possible to use a targeted worming programme. A faecal egg count can be performed to determine the burden of roundworm and a blood test will detect the presence of tapeworm. If the results are low or negative it may not be necessary to use a treatment or prophylactic.



Some practical measures can be taken to control internal equine parasites. Dung should be removed from the pasture two or three times a week and care must be taken not to have too many horses on the pasture. Where possible, the pasture should be rotated and grazed with cattle or sheep because these animals reduce the worm burden on the land.

Research has shown that 70 per cent of horses in the UK may be infected with tapeworm, roundworm or both. In spring, these parasites can be targeted with praziquantel (on its own for tapeworm) or combined products (eg, praziquantel/ivermectin or praziquantel/moxidectin). Alternatively, a double dose of pyrantel may be given.

By using a targeted approach, the problem of anthelmintic resistance can be tackled, thereby preserving the efficacy of existing equine anthelmintics. — *Sue Southgate and Cathy Amos, Murray Farm Care, Dumfries*

VPG chairman's comments

The creation of a General Pharmaceutical Council together with a royal college-type body for the pharmacy profession brings yet another major change to challenge and excite us. For veterinary pharmacy, still adjusting to the introduction of the Veterinary Medicines Regulations, this is another journey into the unknown. However, I am of the view that change is an opportunity for progress and improvement and we must address this current restructuring as such.

I suppose we need to acknowledge that veterinary pharmacy is a combination of routine and specialist professional activities. Supplying veterinary medicines for companion animals is something that any community pharmacist can aspire to. More than half our customers are pet owners. Learning how to treat cats and dogs for worms and fleas (the main commercial areas) is well within the abilities of pharmacists and their staff. Supplying livestock medicines, on the other hand, is a more specialised area of practice. There are also, of course, areas of specialised practice for companion animals available to more determined practitioners. As a consequence, veterinary pharmacy needs to be part of any specialist faculty activity that may become part of a royal college-type institution.

The committee is looking even further ahead, to the year 2020, for the theme of the VPG annual conference on 8 June. There we will debate whether the pharmacist is an essential part of the animal health team of the future. I encourage as many of you as possible to attend this year's conference, to be held in the Royal Pharmaceutical Society headquarters at Lambeth. Involving pharmacists, vets, manufacturers and other key stakeholders it promises to be great value for time invested. — *Andrew Cairns*

Report on over-the-counter market published

Retailers of ethical and over-the-counter veterinary products traditionally represent separate marketing channels. Developing new compounds entails a large amount of time and expense and the simplest method of expanding into the OTC market is to switch an ethical product to OTC. However, to reposition a product, insight into successful marketing is essential, according to John Hales and Sarah Hales, co-authors of the new *Animal Pharm* report "The OTC animal health global market opportunity."

There are, of course, obstacles to overcome in switching from prescription only to OTC. For example, regulatory approval must be obtained and a switch to OTC may conflict with existing ethical sales. But for manufac-

turers with brands nearing the end of their product lifecycle, jumping these hurdles can be particularly worthwhile.

The report examines the various market forces acting within the distribution of veterinary medicines. Key market drivers are identified and consideration is given to the regulatory environment. Leading companies with major stakes in the OTC market are reviewed and existing products profiled to provide examples and outcomes of past strategies. The authors also look at an additional dynamic recently introduced in to the established market: the internet.

A free executive summary of the report and table of contents can be downloaded from www.animalpharmreports.com

New paste for rabbits

Intervet UK reports that the often overlooked single-celled parasite *Encephalitozoon cuniculi*, which affects up to 50 per cent of all domesticated rabbits, now has a new enemy in Panacur Rabbit. This is a paste that should be administered daily for nine consecutive days, two to four times a year.

E. cuniculi infections can lead to convulsions, kidney damage, blindness, ataxia and the sudden onset of head tilt. Hosts can pass the parasite to other rabbits and other species they come into contact with so they should also be dosed during periods of high risk (eg, when the rabbit is acquired, before mating and when mixing with others). Panacur Rabbit is marketed in accordance with the Small Animal Exemption Scheme.

The Veterinary Medicines Regulations 2006 permits some medicines for small animals to be marketed without the requirement for a marketing authorisation.



Comment: we need to take full advantage of new opportunities

Community pharmacists play an important role in responding to questions on a wide variety of health issues. For example, in recent months, many colleagues will have been asked by worried customers about bird flu. But enquiries we deal with can often impinge on public health on a wider scale than the items on the current Government agenda. Examples include flea bites, ringworm and the need for pregnant women to avoid risks from contact with cat litter. Over 60 per cent of human infectious diseases can have a zoonotic association and pharmacists can convey the message that healthy pets make for healthy families. About 50 per cent of a pharmacy's customers have a cat or dog and probably half of them fail to worm their pets routinely in spite of the adverse effects of infestation on the pet and the health risks it can present to the pet's owner and family.

Changes in legislation since November 2005 mean that some long standing prescription-only veterinary medicines can be reclassified to POM-VPS and, therefore, they will be available from pharmacists. For example, Merial's Frontline (containing fipronil) has already been reclassified in this way. This product treats and prevents infestations of fleas and biting lice. Fipronil is also active against the tick *Ixodes ricinus*, an important vector of Lyme disease.

The authority to sell more veterinary should be a wake-up call. Given such profes-



Healthy pets make for healthy families

sionally interesting and worthwhile challenges, we should try to find a little time to make ourselves known to local vets. It would help to counter some of the unfair and negative images they may have of pharmacists and the lack of awareness of the contribution we can make. While it may not at first be easy, perseverance can be rewarding. — *Michael Jepson*

Doomed hedgehogs are granted reprieve

Scottish Natural Heritage (SNH) has announced that the cull of hedgehogs on the Western Isles has ended in favour of a translocation trial. The Uist Hedgehog Rescue coalition (UHR), comprising hedgehog experts, animal welfare and wildlife rescue and rehabilitation organisations, has opposed the killing of hedgehogs on the Uists since SNH announced its lethal policy in 2002. In order to save as many healthy wild animals as possible, UHR has rescued and relocated 756 hedgehogs over the past four years.

The end of the cull followed a statement from the Scottish Society for the Prevention of Cruelty to Animals that it had changed its policy in support of UHR's call for the killing to end. The policy change was attributed to new scientific research confirming that the relocation of hedgehogs from the Uists to mainland Scotland is humane.

Advice for pet owners

The Pet Health Council has launched updated information leaflets, offering essential advice for both current and potential pet owners on a wide range of topics, from guidance on buying pet insurance to facts about *Toxocara* infections. The leaflets are free to download from www.pethealthcouncil.co.uk. To contact the Pet Health Council directly, telephone 020 7255 5408 or email phc@uk.grayling.com

IN BRIEF

The Editor's literature review

Organophosphates

Organophosphorus pesticides are used widely for agriculture, vector control and domestic purposes. Despite the apparent benefits of these uses, acute organophosphorus pesticide poisoning is an increasing worldwide problem, particularly in rural areas. According to an article in the *BMJ* (2007;334:629–34), organophosphorus pesticides are the most important cause of severe toxicity and death from acute poisoning worldwide, with more than 200,000 deaths each year in developing countries.

Although the incidence of severe acute organophosphorus pesticide poisoning is much less in developed countries, many patients with acute low dose unintentional or occupational exposures seek medical help. The article provides an excellent evidence-based review of the management of acute organophosphorus pesticide poisoning. Risk assessment in patients with acute unintentional poisoning is discussed in addition to special considerations for severe poisoning.

Dog bites

The measures associated with treating dog bites are described in a recent *BMJ* article (2007;334:413–7). Of the estimated 740 people per 100,000 bitten by dogs each year, a minority seek medical attention. Overall, 2.6 per 100,000 need hospital admission. Half of all children are reportedly bitten by dogs at some time,

boys more than girls. Most attacks are apparently unprovoked, but dogs are not always to blame. Dogs resent being disturbed while eating and dislike being threatened or feeling that their territory is being invaded. And they can be jealous of attention given to other family members.

Litigation associated with dog bites occurs at a steady rate in the UK, usually initiated by people attacked while walking or delivering mail — an estimated 5,000 postal workers seek medical help for bites annually in the UK. Compensation claims are also made regularly against clinicians for alleged mismanagement of the original injury. Initial management of a dog bite includes the following points:

- Irrigate the wound copiously, using tap water or normal saline
- Remove any foreign bodies (eg, teeth)
- Perform a thorough wound toilet and debridement where necessary
- Delay closure of the wound where possible
- Raise and immobilise the limb if the injury is associated with (or is likely to cause) swelling
- Antibiotics may be indicated, depending on the risk factors for infection
- Review bites within 48 hours
- Although tetanus after animal bites is rare, all guidelines in common use advise tetanus prophylaxis