



# Veterinary *Pharmacist*

May 2006

FROM THE EDITOR

## Dear Reader

Although the VPG tends to concentrate on promoting pet care we must not forget that veterinary pharmacy includes agriculture. For colleagues who are active in this area of practice, this edition contains items on hormonal growth promoters (pS3) as well as the suspension of cypermethrin sheep dips (right).

In June 2005, *Veterinary Pharmacist* briefly reported on a survey by Monie *et al.* The paper has now been published in *The Veterinary Record*. In it, the authors conclude that many pharmacists in Great Britain have little understanding of veterinary medicines. We revisit the research in a little more detail on pS2. The authors also make suggestions for what pharmacists should be taught, particularly with respect to legislation. There are, however, many aspects of legislation that are misunderstood by our veterinary colleagues, including the prescribing cascade, so it is important for the two professions to work together.

The VPG summer conference will be held in Stratford-upon-Avon in July. The VPG has run two successful events in the past year (in Telford and Lambeth) and this one promises to be just as good. Stratford-upon-Avon is a reasonably central venue — delegates will find the day beneficial whether they are just starting out in veterinary pharmacy or are old hands. The summer conference is a chance to renew and make friendships and to discuss practice. Do consider coming on Saturday night, if possible, for the dinner followed by our world famous entertainment.

I hope you enjoy this edition of the newsletter. If you have any comments or suggestions please get in touch at [vetpharmnewsletter@yahoo.co.uk](mailto:vetpharmnewsletter@yahoo.co.uk)

Have a good summer!

Steven Kayne

## MAs for cypermethrin sheep-dip suspended until further notice



Sheep are most commonly treated with ectoparasiticides by dipping

In July 2005 the Environment Agency presented a report to the Veterinary Medicines Directorate (VMD) describing pollution arising from the use of sheep-dip. Between January 2004 and August 2005, 32 “sheep-dip incidents”, which had caused major or significant damage to wildlife in rivers, were investigated. The 12 most serious cases involved cypermethrin dips. Most of the incidents occurred in Wales and had, apparently, arisen from the routine use of dips rather than from their disposal. All these cases involved the loss of aquatic invertebrate species. In particular, one case in Cumbria involved the loss of a great many crayfish, a protected species.

In October 2005, following the advice of the Veterinary Products Committee, the holders of marketing authorisations for cypermethrin dips were asked to provide data to support a recommendation for the length of time newly dipped sheep should be kept in pens to ensure that excess dip has drained from their fleeces. Marketing authorisation holders (MAHs) were also asked to provide an assessment of risks presented by sheep entering a watercourse after they are allowed to return to pasture. The deadline for this information was April 2006 but MAHs were unable to meet this deadline and it has been extended.

The VMD and the Environment Agency are jointly funding a project to estimate the potential of newly dipped sheep to contaminate water with cypermethrin (eg, the potential for the compound to be transferred to

ground surface waters in runoff) and to determine the concentrations of cypermethrin released into the farmyard.

A number of other veterinary medicinal products are available for the treatment of ectoparasites. These include three organophosphorous sheep-dips for treating all sheep ectoparasites, 11 injectable products for treating sheep scab and three dips and five pour-on products for preventing or treating blowfly (three of these pour-ons also treat ticks).

In the light of the evidence on the serious environmental damage caused by the routine use of cypermethrin sheep-dips and the alternative products available for sheep ectoparasite control, the VMD decided to seek agreement from the Department for Environment, Food and Rural Affairs to suspend the marketing authorisations for cypermethrin dips as a precaution. When the information from the MAHs on minimising the risks from the routine use of these products becomes available, consideration to allowing products to return to the market will be made.

### VPG summer conference 2006

Choosing Animal Health through Pharmacy

Dates: 15–16 July

Venue: Stratford Manor Hotel, Stratford-upon-Avon

Topics include zoonoses, vaccines, veterinary medicines and case studies. Full details will be published in the *PJ* shortly.

Please keep the dates free and join us if you can!



## More knowledge needed to supply animal medicines

A paper by Monie *et al*, published in *The Veterinary Record* on 18 February (2006;158:223-6), reported the findings of a survey, carried out in November 2004, to assess pharmacists' awareness of veterinary medicines. The survey was designed to try to identify the areas in which pharmacists were likely to need training in order for them to be safely involved in veterinary pharmacy. It also sought to identify how pharmacists currently perceive their competency regarding veterinary pharmacy.

Five hundred questionnaires were sent out to pharmacies across Great Britain and 186 replies were received. Almost half (47 per cent) of the pharmacists were involved in dispensing veterinary prescriptions, but the numbers dispensed were low (mean 7.6 per year). Most pharmacists (86 per cent) thought that they needed to improve their knowledge to allow them to dispense veterinary prescriptions safely and 45 per cent of pharmacists expressed an interest in obtaining this competency, even if costs in time and money were significant.

Survey respondents were given a series of scenarios relating to the dispensing of both prescription-only and non-prescription products and asked how they would act.

Many pharmacists were unsure of their reaction in these situations. There was poor awareness of the toxicity of human medicines in animals, with the exception of aspirin, and the authors expressed concern that a default action not to dispense a medicine if the pharmacist was unsure of it appeared absent.

The survey results highlight what appears to be a poor ability to identify contraindicated medicines or overdoses, though the authors acknowledged that lack of access to material to check these may contribute to this. It also appeared that the capacity of a pharmacist to check a prescription depends on the information on the prescription and that, due to the variability of veterinary species, greater information would need to be included than is currently legally required, to account for species, breed and weight variations.

Questions were also asked to try to identify how well pharmacists understood the legislation related to veterinary pharmacy. The respondents showed a poor awareness of the implications of the Veterinary Surgeons Act 1966 or the prescribing cascade.

In conclusion, the current awareness level was unsurprising given the low level of involvement in veterinary dispensing. The implementation of the new veterinary medicines legislation would be likely to increase the role of pharmacists in veterinary pharmacy but, without adequate time for training, animal safety could be jeopardised. This training would need to include the law relating to veterinary dispensing, licensing, and diagnosis, and the veterinary pharmacology of POM and non-POM products. — Owen Monie

What do you think about the survey results? Have your say; send any comments to the newsletter website: [vetpharmnewsletter@yahoo.co.uk](mailto:vetpharmnewsletter@yahoo.co.uk)

### Competition

This issue's competition has a practical aspect: pharmacists are often asked to assess the weight of an animal when selling worming products in order to work out the correct dose. In the old days, many pharmacies had a penny-in-the-slot weighing machine that performed the job admirably (with a bit of pushing and shoving), but most of us have long since disposed of them. Pictured below is Logan, a black Labrador mix. What do you think his metric weight is? Answers to: [vetpharmnewsletter@yahoo.co.uk](mailto:vetpharmnewsletter@yahoo.co.uk)

A prize will go to the person who sends in the closest estimate before 20 May 2006.



**Winners** The animal in January's competition was a Bedlington Terrier, associated with Northumberland. The first correct answers were from Ian Wilkinson, Walton-on-the-Hill, Surrey; Jane Ridder-Patrick, Edinburgh; and Ron Caine, Cockburnspath, Berwickshire.

Thanks to Murray Farm Care, Dumfries, for supplying the prizes.

### PDSA funds over 322 PetAid practices

In communities too small for a People's Dispensary for Sick Animals (PDSA) PetAid hospital, the PDSA has arranged for over 322 local private practices to provide free treatment on its behalf. PDSA PetAid practices offer a full range of medical and surgical services for sick and injured pets.

Treatment is free of charge, but only for pet owners who are in receipt of housing benefit or council tax benefit and who pre-register for PDSA PetAid services before their pet falls sick or is injured. However, because these services are funded entirely by donations from the public, all owners are encouraged to make a donation towards the cost of their pet's treatment. The PDSA veterinary service is restricted to companion animals kept in the home or in a hutch.

Each PDSA PetAid practice has a catchment area defined by postcodes. Pet owners living outside these areas may be able to register with a PDSA PetAid hospital, or apply for a grant from the PDSA special request scheme. Only one pet per eligible household can be registered at a PDSA PetAid practice.

Clients may enquire about their eligibility for PDSA services by telephoning 0800 71 2502.

Further details of the scheme (and some interesting case studies) are available at [www.pdsa.org.uk](http://www.pdsa.org.uk)

### Rhinos and the prescribing cascade

What is available to treat a rhinoceros with an infected foot? This is just an example of one of the increasing number of queries about veterinary medicine that has been made to the National Pharmacy Association information department. The question also raises a number of interesting issues about the 2005 Veterinary Medicines Regulations.

The cascade system requires veterinary surgeons to prescribe only licensed animal medicines. In order to alleviate unacceptable suffering, the vet may prescribe animal medicines that are licensed for use in another species or for other conditions in the same species. If there is no such product available, the vet may prescribe a medicine licensed for use in humans.

As far as we know, there are no medicines licensed in the UK specifically for use in rhinoceroses. There are antibiotics licensed for use in other species but the concentration of these preparations means that a large volume would have to be given to ensure adequate dosage. A much smaller volume could be given if a human medicine is used.

This item was contributed by Michelle Styles, head of information at the NPA, who will be presenting other examples of queries received by the NPA information department at the VPG Summer Conference in Stratford-upon-Avon (See pS1 for details).

# Hormonal growth promoters: why the debate?

John Verrall, founder member of The Food Ethics Council, gives the background to the current debate surrounding hormonal growth promoters

**H**ormonal growth promoters (HGP) stimulate growth by the increased deposition of protein — the ratio of food converted into protein is enhanced. The effects are achieved predominately in ruminants but these substances have also been used in poultry, a pellet of diethylstilbestrol or hex-oestrol being implanted into the neck of the bird.

The use of anabolic steroids as hormonal growth promoters dates back to 1947. The US government approved the use of diethylstilbestrol in cattle and poultry in 1954. However, in 1979, its use was banned worldwide when it was shown to be both teratogenic and carcinogenic and that prenatal administration of diethylstilbestrol in humans could cause birth defects in subsequent generations. Such information broadened interest from what initially was a single concern about residues in meat and the picture was complicated by a paucity of information on the pharmacokinetics of HGPs and their metabolites. It should be remembered that the use of HGPs preceded the Medicines Act 1968, with its requirement for licensed products to demonstrate quality, safety and efficacy.

In 1988, the EC introduced a prohibition order on the use of other hormonal substances for yield enhancement within its borders, and banned the importation of bovine meat from countries outside the EC unless a hormone-free cattle programme was in place. The banned substances included three natural hormones (17- $\beta$ -oestradiol, testosterone and progesterone) and three synthetic hormones (trenbolone, zeranol and melengestrol acetate [MGA]). All were administered as implants, apart from MGA, which was a feed additive.



Philip Connelly

## Ruminants were given hormonal growth promoters

The US and Canada, where such hormones continue to be used, contested the EC action which they regarded as a “constraint of trade” and applied retaliatory measures in 1989. These included an import duty on a variety of EC goods and, since then, there has been a continuing battle between the EC and the US and Canada through the World Trade Organization.

The EC Scientific Committee on Veterinary Measures relating to Public Health (SCVPH) has stated that 17- $\beta$ -oestradiol is carcinogenic, exerting both tumour-initiating and tumour-promoting effects — an opinion that appears to be supported in the 11th US Report on Carcinogens.<sup>1</sup> Furthermore, under an EC Directive passed in September 2003, the ban on the use of 17- $\beta$ -oestradiol will be extended to some therapeutic applications (eg, in oestrous induction or synchronisation

in cattle, horses, sheep and goats) from October 2006.

Meanwhile in the UK, the Veterinary Products Committee has posted a report entitled “Risks associated with the use of hormonal substances in food producing animals”<sup>2</sup> on its website. The report concludes that “there are important gaps in the evidence base that preclude producing a definitive risk assessment for 17- $\beta$ -oestradiol and the other five hormonally active substances”.

## References

1. US Department of Health and Human Services. 11th Report on Carcinogens. Available at: <http://ntp.niehs.nih.gov> (accessed 18 April 2006).
2. Veterinary Products Committee. Risks associated with the use of hormonal substances in food producing animals. Available at: [www.vpc.gov.uk](http://www.vpc.gov.uk) (accessed 18 April 2006).

# No more mole strychnine from September

The supply and use of strychnine for killing the European mole, *Talpa europaea*, falls under two different, but related, EC Directives on pesticides. Major review programmes are running under both these directives to ensure that all currently authorised pesticides meet modern human and environmental protection standards. Strychnine hydrochloride is one of many pesticides affected. The chemical will not be authorised for supply or use for mole control after 1 September 2006. The Department for Environment Food and Rural Affairs and its equivalents in Scotland and Wales will aim to issue the last authorities to purchase strychnine by 31 May. All strychnine purchased under these authorities must

be used up by 31 August 2006. Using strychnine as a plant protection product (eg, to prevent crop damage) has been illegal since 1 January 2005.

There are two chemical alternatives to strychnine on the market for the control of moles: Phostoxin by Rentokil (55 per cent aluminium phosphide) and Talunex by Luxan (57 per cent aluminium phosphide). Both are supplied in tablet form and release phosphine gas when in contact with moisture. There is still a degree of hazard for the operator because of the need to avoid inhaling the gas. — adapted from “Strychnine withdrawal” Pesticides Safety Directorate [www.pesticides.gov.uk](http://www.pesticides.gov.uk) (accessed 20 April 2006).

## IN BRIEF

### BSE in the US

The US Department of Agriculture has confirmed a beef cow in Alabama as the country’s third case of bovine spongiform encephalopathy. The animal was killed and buried at the farm where it was kept — it never entered the food chain. This comes as a blow to US exporters — their market in Japan was reopened in December 2005, after a two-year closure, only to close again in January when veal containing spinal material was shipped to the country. Previous cases of BSE were in 2003 and 2005 — *USA Today* 14 March 2006



## From the VPG chairman



The new Veterinary Medicines Regulations have now been in force for six months and, with the exception of a few matters requiring clarification for pharmacists regarding supervision, seem to be working acceptably. It is an important feature that pharmacists are permitted to break bulk of the primary product packaging (the wrapping of containers normally handled by the consumer), with the exception of injectables. The VPG is, however, concerned that there have, as yet, been no reclassifications of prophylactic medicines from POM-V to another category that can be prescribed or supplied by pharmacists (POM-VPS or NFA-VPS), particularly of the pet flea products, and the Society is continuing to pursue the case for these.

The Society's Guidance Notes for Community Pharmacists on Veterinary Medicines are now available on the Society website ([www.rpsgb.org.uk/members/practice/](http://www.rpsgb.org.uk/members/practice/)). This is a really useful guide to how the new regulations apply to pharmacists and includes helpful guidance about labelling.

Much debate is going on at the moment about whether the postgraduate Diploma in Veterinary Pharmacy should remain at the Society or be run by one or more of the schools of pharmacy. At a recent meeting, the VPG committee was of the view that the diploma, as well as the Certificate on Companion Animal Healthcare, should continue to operate "in house". In the meantime, I offer my good wishes to the new cohort of certificate and diploma students about to start their studies.

It is also recognised by the VPG committee that provision of more veterinary content in the core curriculum of schools of pharmacy is important for the future. A VPG deputation led by Bob Michell will be speaking to the Education Committee in the future to explore how this can be encouraged.

Of considerable strategic importance for veterinary pharmacy is how it will operate within the new national board structure. The VPG committee is currently in discussions with officers of the Society to plan the way forward.

Finally I do hope that you will consider attending this year's Summer Conference for an outstanding social and educational experience.

— Andrew Cairns

## Pet Health Council activities

The Pet Health Council comprises a panel of expert veterinary and medical professionals, including representatives of the Royal Pharmaceutical Society. The Pet Health Council provides independent advice and information regarding the health and welfare of pet animals, in the interests of both pets and people. The RPSGB is joined by the National Pharmacy Association, Royal College of Nursing and Society of Companion Animal Studies which together provide input and knowledge from human health organisations. With regard to animal health, associated organisations include the British Veterinary Association, the British Small Animal Veterinary Association, the National Office of Animal Health and the Pet Food Manufacturers Association.

### In the news

Recently, avian influenza has received considerable media attention. Bird flu has implications for both animal and human health and

the Pet Health Council has been providing advice to concerned pet owners, in addition to providing comment to the media.

Pharmacists can reassure pet owners during this time. It is important that owners continue to care for their animals responsibly because pets depend on their owners to provide the best possible care to ensure good health and wellbeing. It is essential that pet owners do not abandon their cats, dogs or any other pet.

The risk of bird flu is low and there is no need for special precautions to be taken at this stage. There is also no evidence that pets are involved in the transmission of highly pathogenic bird flu.

[www.pethealthcouncil.co.uk](http://www.pethealthcouncil.co.uk)

The PHC website offers pharmacists, as well as the public and media, a valuable source of information about pet and human health.

## Veterinary resources for pharmacists

As a practising pharmacist, why not make sure you are up to speed on prophylactic health measures affecting pets, particularly cats, dogs and horses. Pharmacists already have specialist knowledge of many public health issues and a number of zoonoses — they are probably the only professionals on the high street with such knowledge. Pet care is a sizeable market, at present much in the hands of pet shops and some supermarkets which rarely have professional expertise. However, with the new Veterinary Medicines Regulations, pharmacists now have the opportunity to get more involved with veterinary prescriptions and contribute to prescribing for customers' pets.

So why not ensure that, metaphorically speaking, you kill two birds with one stone — re-establish this somewhat overlooked area of pharmacy and meet your CPD requirements at the same time. This can be done by getting involved with the Royal Pharmaceutical Society's two-module flexible distance-learning programme for the Certificate in Companion Animal Healthcare. The cost of the programme is modest (the price has been held, since 2004, at £500) and includes an 86-page workbook.

Alternatively, you could go for the four modules, complete the Diploma in Veterinary Pharmacy (first established in 1981) and gain the designated letters DVet Pharm after your name. The four modules cost £800 and include an intensive residential week. The

course directors look forward to having you on board.

### Resource pack from the NPA

The National Pharmacy Association has just launched a resource pack, "Animal Medicines Resource Pack", to help its members branch out into veterinary pharmacy. Vets are now required to offer clients prescriptions for veterinary medicines and owners are free to take the prescription to any pharmacy to be dispensed should they wish to do so. This could potentially open up the whole pet product market in pharmacies as customers realise they can shop for their pets at the same time as themselves.

This pack gives useful background into the animal medicines market and the veterinary new regulations, where pharmacies can obtain stock, what they should sell, and how to display it. There is also a section on support materials for staff. The pack will also serve as an ongoing source of reference as pharmacists get more involved.

Details about the certificate and diploma are available from the VPG secretary (e-mail: [lorraine.fearon@rpsgb.org](mailto:lorraine.fearon@rpsgb.org))

NPA members who would like to obtain a free copy of the resource pack should contact Jan Hamilton (tel: 01727 858687 ext3257; e-mail: [j.hamilton@npa.co.uk](mailto:j.hamilton@npa.co.uk))