Editorial

What counts as responsible use of ‘spot ons’?

ANTIBIOTICS are often the first products that spring to mind whenever a discussion starts about the responsible use of medicines. Recent years have seen steady progress to reduce usage in the UK’s farm animal sector (see page 424), with similar sector-specific targets now being rolled out to the companion animal and equine sectors.

But there is growing appreciation of the need to reduce, refine or replace the use of other veterinary medicines too.

For example, vet leaders have previously talked about the need to ‘think smart’ on anthelmintics (VR, 21 March 2020, vol 186, p 338) because of escalating resistance among endoparasites.

But while the evolution of treatment-resistant fleas and ticks is certainly possible, it is not much of a concern in reality; instead, the desire for a shift towards responsible use of ectoparasiticides is borne primarily out of concern about their environmental impact.

One study found high concentrations of certain toxins, assumed to have originated from the use of flea and tick treatments for pets, in rivers across England between 2016 and 2018 (see page 425).

Laura Higham from environmentalist vet group Vet Sustain told Vet Record that, ‘notwithstanding the significant knowledge gaps’, it should ‘lead us to question the dominant practice of routine prophylactic insecticide treatments in companion animal practice, and consider adopting a risk-based approach to parasite control’.

The issue of the environmental impact of ectoparasiticide treatments such as ‘spot ons’ is not entirely new – environmental scientist Jason Weeks, of the Veterinary Products Committee (VPC), an independent scientific committee that advises the Veterinary Medicines Directorate, warned two years ago that it was ‘quite likely’ that such products pose risks to aquatic insect populations (VR, 27 October 2018, vol 183 p 490).

That they may kill small invertebrate wildlife should be somewhat obvious – after all, this is in essence what they were designed to do.

But there isn’t agreement as to the extent of the threat to our waters. Another study (‘Development of an aquatic exposure assessment model for Imidacloprid in sewage treatment plant discharges arising from use of veterinary medicinal products’, published in the journal Environmental Sciences Europe and funded by the pharmaceutical company Bayer) found smaller than expected quantities of imidacloprid-containing veterinary medicinal products in UK waters.

However, even if ectoparasiticides are found conclusively to be responsible for the toxicity levels, the solution to this problem is not clear cut because pet owners cannot simply cease using these products. As vet and parasitologist Ian Wright sees it, year-round flea treatment for cats and dogs ‘remains essential’ – for several reasons, including the danger that if veterinary professionals do not recommend treatment then infestations will inevitably occur.

This in turn could lead to many pet owners seeking flea products elsewhere, often without correct application advice, ‘leading to more environmental contamination, not less’.

There are sufficient concerns in this area to argue the case for making it so that all these medicines are available by prescription only – but there is no sign of any imminent move in that direction.

Given this imperfect situation, perhaps the best available option is simply to ramp up education of the public.

Responsible use should mean just that; cutting back where appropriate, but also ensuring that these medicines are used correctly, in the most effective way and with the least amount of collateral damage caused to the natural world.

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