VETERINARY MEDICINES

Diclofenac and vulture populations

I AM writing to draw attention to an urgent conservation issue that directly concerns the veterinary profession. Members might be aware that the use of the NSAID diclofenac for the treatment of livestock in the Indian subcontinent was responsible for the loss of more than 99 per cent of India's vulture population, which once numbered in the tens of millions of pairs. I personally witnessed the extinction of whole colonies of birds in the space of a few years during my time in Pakistan, assisting efforts to investigate the cause of these catastrophic declines. Thankfully, when we presented the conclusions of our research, that vultures were particularly sensitive to the nephrotoxic side effects of diclofenac through consumption of treated livestock, the governments of Pakistan, India, Nepal and Bangladesh moved quickly to withdraw the sale of veterinary diclofenac products and to assist in the restoration of the species affected.

Given these events a decade ago, you can imagine my dismay to learn that the European Union has approved licences for veterinary diclofenac products for the treatment of livestock in Spain and Italy, and is considering applications from a number of other countries. Spain is particularly important in conservation terms, as it supports more than 95 per cent of Europe's vulture populations. These birds have benefited from a symbiotic relationship with Spanish farmers, by efficiently disposing of fallen stock at an annual saving of €1 million to €1.5 million to the agricultural industry. There are no grounds for believing that events in Asia could not be repeated in Europe. In India, contamination of as few as 0.1 per cent to 0.3 per cent of carcases was sufficient to produce the devastating losses observed, so even with strict controls it is quite feasible for similar levels to be achieved in European livestock, which constitute the birds' primary food source.

Diclofenac toxicity has seriously impacted vultures from three genera, and Europe's most abundant species, the Eurasian griffon (*Gyps fulvus*), is known to be susceptible. In the light of the speed with which south Asian governments withdrew diclofenac products when presented with the evidence, it is alarming that European nations are able to license similar products in full knowledge of the environmental implications. In my view, these decisions directly conflict with the EU's Birds Directive, and must surely contravene veterinary drug legislation designed to prevent environmental impacts.

These decisions are particularly hard to comprehend given the availability of an alternative NSAID in the form of off-patent meloxicam, which is perfectly safe for vultures at therapeutic doses and has been successfully introduced as a replacement in the Indian subcontinent. A petition calling on the EU to withdraw these licences has been launched at http://tinyurl.com/kzqxd96, and colleagues who are concerned about the issue may also want to voice their professional concern by contacting their MEPs.

Veterinarians were unwittingly responsible for the declines of vultures in Asia, but we were also critical to identifying and responding to their source. It is our duty to ensure that the mistakes of the past are not repeated.

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