

## VETERINARY RECORD

### Treatment for dogs alleviates fear of noisy fireworks

With Bonfire Night approaching, many dogs suffer anxiety and fear from the loud bangs and explosions of firework displays. A study published by **Veterinary Record** shows how a medicinal treatment can help alleviate common fear behaviours, such as trembling and whining.

The study has won this year's **Veterinary Record Impact Award** for research that is considered likely to have the most significant practical impact by the journal's research editorial team.

It was selected from around 150 papers published by Veterinary Record last year, due to its highly practical outcome for an issue often seen by vets in small animal practice.

After a rigorous judging process, the paper was commended as an important contribution to improving the welfare of both pets and owners, and for being a high-quality (double-blinded) study of the appropriate power. The innovation is now available as a treatment on prescription by vets.

Sensitivity to noise is among the most common behavioural concerns for dog owners but is often inadequately treated.

A research team, led by Dr Mira Korpivaara at Orion Pharma, developed an oral gel form of dexmedetomidine that could be administered by dog owners at home.

On New Year's Eve 2012, 182 dogs with a history of acute anxiety and fear associated with fireworks noise were given either dexmedetomidine gel (89 dogs) or identical placebo (93 dogs) as needed up to five times, as part of a randomised, double-blinded study.

Owners assessed the overall treatment effects as well as signs and extent of anxiety and fear at several pre-defined time points before and during the New Year's Eve, according to the study protocol.

A higher proportion of dogs were reported to have good or excellent treatment effect in the dexmedetomidine group (64 of 89, 72%) than in the placebo group (34 of 93, 37%) - meaning that the dog did not show any signs of fear and anxiety due to fireworks exposure or the signs were mild and temporary.

Dogs in the dexmedetomidine group displayed fewer signs of fear and anxiety than dogs in the placebo group, despite the noise of fireworks, including panting, trembling, vocalising (whining, barking, growling, howling), pacing and inappropriate urination.

The authors conclude that dexmedetomidine “significantly reduced behaviours related to fear and anxiety over time, and the overall effect and success of treatment were found superior to placebo.” Furthermore, they say the dose used was “safe and devoid of any significant clinical sedative effect.”

Finally, the novel administration form and delivery system was found by owners to be easy to use across the range of dogs tested, they add, but would like to remind veterinarians of the importance of instructing the clients carefully on correct use of new medications.

The authors would also like to emphasise that a personalised treatment plan should be set up for every patient covering all appropriate treatment options.

Orion Pharma license the dexmedetomidine oromucosal gel to Zoetis, which supply it in the UK to veterinarians.