



It is unclear what impact pheromotherapy has on stress in dogs in shelter environments

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Hello. My name is Tighearnan Mooney. I'm a practicing vet in the United Kingdom, and this is the podcast for the Knowledge Summary titled 'it is unclear what impact pheromotherapy has on stress in dogs, in shelter environments.

The PICO question was: in dogs in shelters, does pheromotherapy reduce stress compared to untreated dogs. Stress is a multifactorial process, which impacts on both physical and emotional health. In shelters dogs are more susceptible to stress, which impacts on their chances of being rehomed, their long term emotional health and the physical health of both the stressed dog and other dogs in the shelter. It is therefore essential that stress is managed and reduced effectively. This knowledge summary aims to provide the veterinarians and paraprofessionals working in shelter medicine with an assessment of the current evidence for the use of pheromotherapy.

A literature search identified two studies, which directly assessed the PICO question. Tod et al's 2005 paper is a blinded randomized placebo controlled study with a sample size of 54 dogs. In terms of study design and sample size it's the stronger of the two papers. The other paper from Hermiston et al 2018 is a repeated measure study with a sample size of 25 dogs. Neither paper is very powerful due to their small sample size and short duration of intervention. Seven days and 30 minutes, respectively, both papers relied on objective measures of barking and subjective ethnographic assessment. In both studies, pheromotherapy resulted in a statistically significant reduction in mean bark amplitude, but not in a change in duration of barking or peak bark amplitude. Neither study found a significant change in the expression of fear related behaviors in response to a neutral stranger or a stressor. Based on the studies assessed it is not possible to determine whether pheromotherapy reduces stress in dogs and shelter environments. The two key takeaways from this knowledge summary are the most studies with larger sample sizes, longer durations and needed, and that future studies should utilize validated quality of life assessment tools rather than proxy measures for stress, including barking.

Thank you very much for listening.

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