

Risk factors and behaviours associated with canine separation anxiety and treatment options available to improve welfare.

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Introduction

Separation anxiety is a common behavioural problem affecting 20 to 40% of dogs in veterinary behavioural practice (Seksell and Lindeman, 2001). It is characterised by signs of distress when affected animals are separated from an owner or family group to which the animal is highly attached. Behavioural responses include destructiveness, house-soiling, excessive vocalisation, digging or pacing and in more severe cases hypersalivation, vomiting, diarrhoea or self-trauma (Simpson, 2000). It is imperative that veterinarians are able to identify and treat affected dogs in order to reduce chronic anxiety experienced by the animal and thereby improve welfare. If left untreated, the behavioural manifestations of affected dogs are usually undesirable to the owner and are common reasons for abandonment or euthanasia.

Discussion

Two separate studies (Flannigan and Dodman, 2001; Takeuchi et al., 2001) were conducted to determine the risk factors and behaviours associated with separation anxiety in dogs. The studies were similar in that they were both retrospective case studies of dogs previously diagnosed with the disorder. Flannigan and Dodman (2001) reviewed medical records and client questionnaires from Tufts University School of Veterinary Medicine for 200 dogs with separation anxiety and 200 control dogs with other behavioural problems. Of the dogs diagnosed with separation anxiety, presenting complaints were household destructiveness (71.7%), vocalisation (61.2%) and house-soiling (28.1%). A typical profile of the affected dogs was compiled and it was found that 60% of subjects were male, 91% were neutered, 41.9% were acquired from animal shelters and 34.5% were of mixed-breeding.

The above findings are similar to those of Takeuchi et al. (2001) who reviewed case records, questionnaires and follow-up phone calls for 78 cases of canine separation anxiety at Cornell University Animal Behaviour Clinic. This study revealed 64.1% of sufferers to be male, 86% were neutered and 48.7% were of mixed-breeding. In both studies, affected purebred dogs were most likely to be gundogs. Takeuchi et al. (2001) further found that 70% of dogs with separation anxiety were disciplined verbally (not physically) and only 36.6% had been obedience trained.

The second part of the study by Flannigan and Dodman (2001) was to devise a practical index to help diagnose separation anxiety in dogs. Such an index would be of use to veterinarians as many of the behavioural signs associated with separation anxiety are non-specific, making an accurate diagnosis difficult (Overall et al., 2001). Evaluation of client questionnaires was used to determine which signs of separation anxiety could be easily recognised, monitored and graded by owners. The devised index included three behavioural signs; extreme following behaviour, departure cue anxiety and excessive greeting on a scale in which 0 = absence of behaviour, 1 = mild, 2 = mild to moderate, 3 = moderate, 4 = moderate to severe and 5 = severe. A maximum score of 15 would indicate a dog had severe problems in all three categories. The threshold for diagnosis was determined to be 10. In this study, 75.2% of dogs with separation anxiety had an index =10, whereas only 28.9% of control dogs had an index =10. This index derived from owners' reports could be useful in diagnosis, but should not replace careful clinical judgement.

The efficacy of behavioural therapy for dogs diagnosed with separation anxiety was also studied by Takeuchi et al. (2001). Behavioural therapy includes counter-conditioning, desensitisation and obedience training to improve communication and lay down rules between owner and dog. As a result, the dog learns new desirable behaviours in place of the undesirable behaviours. Records of follow-up calls and follow-up postcards sent at least two

months after examination asked whether the dog's behaviour was improved or not improved following behavioural therapy. Owners of 67.9% of dogs reported an improvement. The outcome was even better when dogs were presented within one year from the onset of behavioural signs with 80% of these dogs showing improvement. Overall et al. (2001) suggests that early treatment of separation anxiety gives the dog less opportunity to react to the anxiety-producing stimulus resulting in less neurochemical alteration and reduced phenotypic manifestation of anxiety. This, combined with the suggestion that owners who seek early attention are more likely to comply with discharge instructions may explain the better outcome.

A study by Seksel and Lindeman (2001) was conducted to determine the effectiveness of drug therapy in addition to behavioural modification in the treatment of separation anxiety. Clomipramine hydrochloride selectively inhibits serotonin (5-HT) reuptake by CNS neurons (Landsberg, 2001). A total of 14 dogs diagnosed with separation anxiety were administered clomipramine, orally twice a day, at an initial dose of 1 to 2mg/kg BID. Similar to Takeuchi et al. (2001), a behaviour modification program was implemented with owners receiving verbal and written instructions. Dogs continued to receive medication for at least one month after clinical signs were acceptably reduced. Behavioural therapy continued indefinitely. Following treatment, the behaviour of nine dogs was largely improved, two dogs showed moderate improvement and in three dogs behaviour was unchanged. Most dogs showing little/no improvement had multiple behavioural disorders and thus a poorer prognosis. In contrast to Takeuchi et al. (2001), the duration of abnormal behaviour did not affect prognosis. Treatment of chronic or severe cases of separation anxiety may require drug therapy in combination with behavioural modification.

However, it is not desirable to prescribe a dog antidepressant medication for long periods of time. Seksel and Lindeman (2001) attempted clomipramine withdrawal in eight cases where large behavioural improvements were seen. Withdrawal was successful in five cases and relapse was noted in three cases. Behavioural signs were easily controlled upon reinstatement of treatment. This study indicates that clomipramine should be administered for at least three months and be continued for at least one month after resolution of signs. All three studies suggest behaviour modification should be continued for life.

Conclusions

It has become evident that early detection and treatment of separation anxiety improves the prognosis of affected dogs. To this extent, recent work has focussed on clearly establishing risk factors and behavioural manifestations of the disorder. A thorough understanding of these traits and the use of practical indexes will allow veterinarians to make prompt diagnoses and decisions regarding management of their patients. Treatment should involve behavioural modification in all cases. Concurrent drug therapy with clomipramine has shown to be safe and effective in relieving anxiety, especially in severe cases. Recent studies have confirmed dose rates, duration of treatment and guidelines for withdrawal of the drug.

References

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