

Treatment of noise phobia in dogs: a review of recent studies.

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Introduction

Noise phobias are among the most commonly recognized disorders associated with phobic responses in dogs. Noise phobia precipitates several behaviours that are often considered to be intolerable and can lead to relinquishment or euthanasia of dogs; so it is therefore an important issue in terms of animal welfare (Overall et al, 2001). This paper will look at three recent studies that have investigated different treatments for noise phobia in dogs.

Discussion

Phobic behaviour occurs when there is a persistent fear of a situation to the extent that a dog may panic and place itself in danger (Rogerson, 1997). In the case of noise phobia, behavioural responses may include whining, salivating, eliminating, panting, running, trembling, pacing, cowering and a need to be close to the owner. These types of behaviours cause concern to many owners, particularly if their dog attempts to escape and damages property (Sheppard and Mills, 2003; Crowell-Davis et al, 2003).

One study, conducted by Crowell-Davis et al (2003) investigated the use of clomipramine, alprazolam and behaviour modification for the treatment of thunderstorm phobia. Clomipramine is a drug with anxiolytic properties that can be used to induce control of anxiety in many dogs. Alprazolam has strong anxiolytic properties, and acts more rapidly so it can be administered just prior to thunderstorms. Forty dogs with thunderstorm phobia were treated with clomipramine at 2mg/kg BID for 90 days, followed by two weeks of treatment at 1mg/kg and then two weeks at 0.5mg/kg. Alprazolam was also administered as needed at 0.02mg/kg one hour before storms. The alprazolam was only used in those dogs where the clomipramine was not sufficient protection against the intense fear induced by severe storms (Crowell-Davis et al, 2003). Desensitisation was also used, and owners were required to expose their dog to an audio recording of the phobic sound at increasing intensities. They were asked to reinforce their dog for non-fearful behaviour, using toys or food (Schull-Selcer and Stagg, 1991). Owners were asked to ignore their dog when it was exhibiting signs of noise phobia, to avoid reinforcing the unwanted behaviours. Owners were asked to keep a daily log of weather conditions, desensitization treatment sessions, medication administration and their dog's response to storms (Crowell-Davis et al, 2003).

Owners monitored the response of their dog to storms throughout treatment. Results indicated that 30 of 32 dogs showed a high degree of improvement. Behaviours including panting, pacing, trembling, remaining near the owner, hiding, excessive vocalization, self-trauma and inappropriate elimination all decreased significantly with treatment. Most owners also thought that the treatment made their dog a better pet. Therefore this study showed that the combination of anxiolytic drugs and behaviour therapy can decrease the frequency of phobic behaviours (Crowell-Davis et al, 2003).

Dog-appeasing pheromone (DAP) is a mixture of compounds that have been identified in sebaceous secretions of the intermammary sulcus of bitches shortly after parturition. It is believed to have a calming effect on dogs (Sheppard and Mills, 2003). In a study by Sheppard and Mills (2003), thirty dogs with firework phobia were treated with DAP via an electric plug-in diffuser. Treatment began two weeks prior to Guy Fawkes night, when the highest exposure to fireworks was likely. Owners were also asked to implement behaviour therapy; including ignoring their dog when it was exhibiting phobic behaviour, and engaging their dog in play activities during fireworks. Owners were telephoned weekly and asked to rate the frequency of a checklist of phobic behaviours, and the overall severity of their dog's reaction to the fireworks (Sheppard and Mills, 2003).

Results showed that there was a significant decrease in the frequency of the following individual behaviours; hiding, panting, trembling, cowering, vocalizing, restlessness, running, and salivating. Twenty-two owners reported a lower overall fear response following the treatment with DAP. However, eighteen owners attempted to calm and console their dogs during the fireworks, and 25 owners stated that they generally had not followed the behaviour guidelines. This indicated that owners showed a very poor adherence to the behaviour therapy guidelines (Sheppard and Mills, 2003).

Another study, conducted by Mills et al (2003), analysed three treatments (used alone or in combination) for firework phobia in dogs from two small animal clinics. The treatments included the use of DAP, psychoactive medications (acepromazine or diazepam), and a desensitisation programme involving a CD recording of firework sounds. Owners were able to choose from the treatment options in consultation with their veterinarian. Like the other two studies, clients were advised to also ignore their dog when it appeared anxious. Forty-eight clients replied to a questionnaire asking them to rate the frequency of common phobic behaviours seen in their dogs both before and after the treatment.

The results showed that the CD desensitisation programme and DAP are both effective in reducing a large number of the signs associated with fear of fireworks. The use of both treatments together was associated with a greater overall reduction in owner-seeking behaviour, vigilance, restlessness and salivation than either treatment used alone. DAP alone however, had a greater effect than any other single treatment in reducing the tendency to hide, vocalize or be startled, while the CD alone was associated with a greater reduction in restlessness (Mills et al, 2003).

Conclusion

Overall, the results of these studies provide useful guidance for the treatment of noise phobia in dogs. Often a combination of treatments, including behaviour therapy, can be effective. Caution must be taken with the use of psychoactive medications, as the studies indicated that owners who used these treatments were less likely to comply with behaviour therapies. Larger and more controlled studies, with increased use of placebos may be useful to determine which type of treatment, or combination of treatments, works best to reduce the phobic behaviours.

References

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