The Effects of a Compression Vest on Salivary Cortisol Fluctuation in Canines During Nail Trimming Procedures

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There is limited knowledge regarding the effect of deep pressure therapy on stress reduction in canines during veterinary procedures. This study recruited 20 canines of various breed, age, and temperament undergoing nail trims, and compared both behavioral indicators of stress present, as well as change in salivary cortisol concentration from before to after nail trim with and without the use of a compression vest. Canines were separated into two experimental groups depending on the use of anxiolytic medication, then randomly assigned to either the vest-wearing (T1) treatment or control (no vest) treatment. Experimental groups compared in this study were: unmedicated T1 vs. unmedicated control, medicated T1 vs. medicated control, and unmedicated T1 vs. medicated T1. There was no significance found in percent change of salivary cortisol, or in behavioral indicators of stress present during the nail trim in vest wearing canine groups compared to that of the control. This was true for both medicated and unmedicated experimental groups. This insignificance is most likely due to the small sample size of this study, insufficient sample volume, and duration of stress. Future applications may entail a similar study design with a larger sample size, a different stress inducing event, or a different form of stress measurement.

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