Is Tellington-touch a relaxation technique for dogs?

Alice Dal Toso*

Dog trainer freelance

Abstract: The aim of this research was to assess the effectiveness of Tellington-Touch (TT), a massage consisting in a series of circular touches of the hands and fingers intended to reduce stress, as a relaxation technique for dogs, comparing its effect to casual handling. Fourteen dogs (5 males and 9 females; 39.9 ± 27.1 month old) underwent three sessions with an experimenter who was not a recognized t-touch practitioner. The experimental sessions were conducted in the same experimental room, where the dogs were left free to explore the environment for 1 minute and then, for 4 minutes, they were subjected to:

1. a control session (CT): dogs stayed inside the room with the experimenter who did not interact with the animal;
2. casual handling (CA): dogs were stroked on the whole body by the experimenter;
3. TT: as suggested by a recognised Tellington-touch practitioner, dogs were handled using the following 3 t-touches: Ear Slides, Clouded Leopard and Noah's March.

In the 4 minutes which followed, dogs were left free and videoed in order to measure the duration of behavioral signs of stress (circling, scratching the door, self-scratching, whining, lip licking, restlessness, yawning, shaking and barking).

After each session, saliva was taken for cortisol determination.

Statistical analysis revealed no significant difference between the 3 sessions for saliva cortisol. The comparison of behavioral data (sum of duration in seconds of single behaviors) found that the display of signs of stress was higher in CT (67.5 s) compared to both CA (6.5 s; Z=-3.234; p=0.001) and TT (11.0 s; Z=-3.108; p=0.002), but no difference was found between CA and TT (Z=-0.874; p=0.382).

The results of the current research seem to indicate that, regardless of its type, gentle human touches have a positive impact on stressed dogs. However, while short sessions of gentle handling have an immediate relaxing effect in dogs detectable in their behavior, physiological changes may need longer times of handling. These preliminary results suggest that TT, at least when carried out by a person who is not a t-touch practitioner, has a relaxing effect on dogs similar to that of gentle handling.

Key Words: Tellington-touch, stress, dog, salivary cortisol.

* *Corresponding Author*: aliceiaia.daltoso@gmail.com

Introduction

Dogs (*Canis lupus familiaris*) have lived with humans for many years and they are able to create a strong attachment bond with the human being (Mariti et al. 2013); many owners pay particular attention to the welfare of their animals and they try to avoid them any stress, although many of them do not have very detailed knowledge on this topic (Mariti et al., 2012). A major aspect of dog well-being seems to originate from direct human-animal interaction and it is well known that gentle physical contact may be an effective means of reducing stress (Hennessy et al., 1997). For this reason, owners whose dogs are anxious or distressed are often advised to gently handle their dogs in order to relax them. Such exercise is sometimes carried out using specific techniques, e.g. Tellington-touch (TT). This emerging technique has been found to relax people in care situations

Dog Behavior, 3-2016, pp. 21-25
doi 10.4454/db.v2i3.35

Received, 09/02/2016
Accepted, 12/05/2016

(Wendler et al., 2002) and its use is now often suggested also for dogs (Fox, 2004). TT is a series of circular touches of the hands and fingers intended to encourage and increase relaxation, improve athletic ability, introduce a new sense of awareness, enhance healing and reduce stress (Tellington, 1995).

The aim of this research was to assess the effectiveness of TT as a relaxation technique for dogs, comparing its effect to casual handling.

Subjects, materials and methods

Fourteen dogs (5 males and 9 females; 39.9±27.1 months old) underwent three sessions with an experimenter who was not a recognized t-touch practitioner. Experimenter characteristics were standardized as much as possible: they were 2 girls, from 25 to 30 years old, of medium height and weight (1.60-1.70 m; 50-60 kg), sporty dressed. Each dog was handled by one experimenter and he/she underwent three sessions carried out in a random order to avoid a possible order effect. The experimental sessions, spaced one week apart and always made at the same time of day, were conducted in the same experimental room, where the dogs were left free for 1 minute to explore the environment and then, for 4 minutes, they were subjected to:

1. a control session (CT): dogs stayed within the room with the experimenter who did not interact with the animal;
2. casual handling (CA): dogs were stroked on the whole body by the experimenter;
3. TT: as suggested by a recognised Tellington-touch practinioner, dogs were handled using the 3 following t-touches in this order:

Ear Slides - It is done by stroking the ears horizontally, from base to tip, or by making small circles starting at the base and working toward the tip. This TT is usually advised to have a calming effect on a stressed or hyperactive dog.

Clouded Leopard - This is the basic touch and all of the other circular touches are variations of it. The fingers are slightly curved and finger pads are used to create the circles on the whole body. The Clouded Leopard is usually advised for anxious dogs.

Noah's March - This TT is usually used at the end of sessions, done with a long sweeping motion down the entire length of the body, employing long, slow slides of the fingers and palms, which have to remain flexible and relaxed. Its supposed purpose is to connect all the treated areas.

In the 4 minutes that followed, dogs were left free and videoed in order to measure the duration of behavioural signs of stress (circling, scratching the door, self-scratching, whining, lip licking, restlessness, yawning, shaking and barking).

After each session, saliva was taken for cortisol determination. Saliva was collected with swabs (Salimetrics, State College, PA) gently placed into the cheek pouch of the dog by experimente for approximately 90-120 seconds. Samples were checked for visible contamination with food or blood. After sampling, the swabs were introduced into tubes specifically designed to avoid cortisol sequestration (Salivette; no. 51.1534, Sarstedt, Nümbrecht, Germany), temporarily stored in an iced box before the final storage at -20°C. Before analysis, performed within 15 days, swabs were thawed and centrifuged at room temperature at 1500g for 15 minutes to obtain clear saliva, which was used for cortisol determination using an enzyme immunoassay kit (Salimetrics, State College, PA) (Hekman et al., 2012). Samples were assayed in duplicate, using 25 ml of sample per well. The kit's lower limit of sensitivity was 0.03 ng/ml.

Physiological and behavioral data was compared through Friedman and, when appropriate, through a Wilcoxon test with Bonferroni correction ($p<0.0167$).

Results

The Friedman test revealed no statistical difference between the 3 sessions for saliva cortisol (Figure 1) (median values in ng/dl: CA 7.26; TT 6.25; CT 6.75; p=0.878).

The comparison of behavioral date (sum of duration in seconds of single behaviors) through the Wilcoxon test (Figure 2) found that the display of signs of stress was higher in CT (67.5 s) compared to both CA (6.5 s; Z=-3.234; p=0.001) and TT (11.0 s; Z=-3.108; p=0.002), but no difference was found between CA and TT (Z=-0.874; p=0.382).

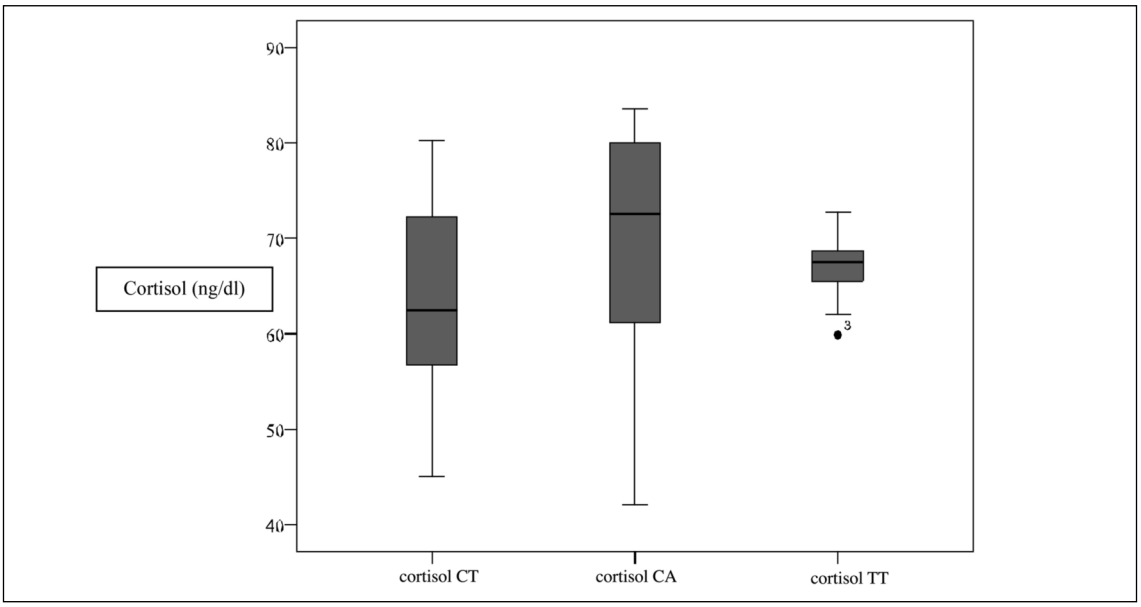

Figure 1. Salivary cortisol (ng/dl) in the CT, CA and TT sessions.

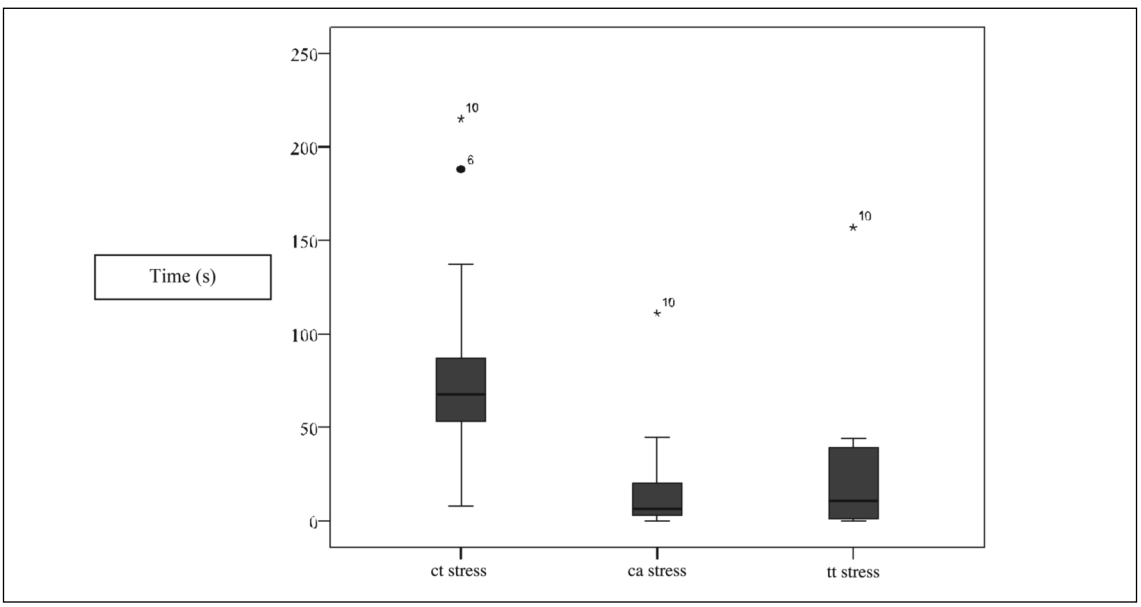

Figure 2. Duration (s) of the signs of stress displayed in the CT, CA and TT sessions.

Discussion

Many researchers have investigated the positive effect of tactile human-dog contact on the physiology, the mental states and the immune system of humans: petting dogs decreases blood pressure and heart rate (Baun et al., 1984; Vormbrock & Grossberg, 1988) and increases the immune defences (Charnetski et al., 2004).

In human medicine, the use of touches in therapy has been shown to reduce anxiety (Heidt, 1981; Quinn, 1982), systolic blood pressure (Quinn, 1984) and to increase functional capacity (Wendler et al., 2002). Hennessy and colleagues (1998) found that 20 minutes of petting reduced cortisol levels in sheltered dogs and suggest that it may be an effective means of reducing stress in other common aversive situations.

Unlike Hennessy and colleagues (1998), in this study, cortisol levels did not differ between the 3 sessions; such difference of findings can be explained by the fact that physiological changes could be produced by longer sessions of gentle handling. Moreover, salivary cortisol is affected by many variables (Dess et al., 1983) and it has a high degree of individual variation (Coppola et al., 2006), that makes it difficult to find significant differences in a relatively small sample.

Therefore, results of the current research seem to indicate that, regardless of its type, human gentle touches have a positive impact in stressed dogs. However, while short sessions of gentle handling have an immediate relaxing effect in dogs detectable in their behavior, physiological changes may need longer times of handling.

Conclusion

These preliminary results suggest that TT, at least when carried out by a person who is not a recognized t-touch practitioner, has a relaxing effect on dogs similar to that of gentle handling. Further research is needed to assess whether TT has a higher effect when done by a practitioner, or personalised on the individual dog or carried out for longer time.

References

Baun M.M., Bergstrom N., Langston N.F.L.T. Physiological effects of human/companion animal bonding. Nurs. Res. 1984; 33: 126-129.

Charnetski C.J., Riggers S., Brennan F.X. Effect of petting a dog on immune system function. Psychol. Rep. 2004; 95: 1087-1091.

Coppola T. Grandin R.M. Human interaction and cortisol: can human contact reduce stress for shelter dogs? Physiol. Behav. 2006; 87: 537-541.

Dess N.K., Linwick D., Patterson J., Overmier J.B. Immediate and proactive effects of controllability and predictability on plasma cortisol responses to shocks in dogs. Behav Neurosci 1983; 97: 1005-116.

Fox M.W. The healing touch for dogs. The proven massage program. Newmarket Press, New Yoork, 2004.

Hennessy M.B, Davis H.N., Williams M.T., Mellott C., Douglas C.W. Plasma cortisol levels of dogs at a county animal shelter. Physiol. Behav. 1997; 62: 485-90.

Hennessy M.B., Williams M.T., Miller D.D., Douglas C.W., Voith V. L. Influence of male and female petters on plasma cortisol and behaviour: can human interaction reduce the stress of dogs in a public animal shelter? Appl. Anim. Behav. Sci. 1998; 61: 63-77.

Hekman J.P., Karas A.Z., Dreschel N.A. Salivary cortisol concentrations and behavior in a population of healthy dogs hospitalized for elective procedures. Appl. Anim. Behav. Sci. 2012; 141: 149-157.

Heidt L.P. Effects of therapeutic touch on aniety level of hospitalized patients. Nurs Res. 1981; 30: 32-37.

Mariti C., Ricci E., Carlone B., Moore J.L., Sighieri C., Gazzano A. Dog attachment to man: A comparison between pet and working dogs. J. Vet. Behav. Clin. Appl. Res. 2013; 8: 135-145.

Mariti C., Gazzano A., Lansdown Moore J., Baragli P., Chelli L., Sighieri C. Perception of dogs' stress by their owners. J. Vet. Behav. Clin. Appl. Res. 2012; 7: 213-219.
Quinn J. An investigation into the effect of therapeutic touch done without physical contact on state anxiety of hospitalized cardiovascular patients. Dissertation abstract Int. 1982: DA 82-26-788.
Quinn J. Therapeutic touch as energy exchange: testing the theory. Adv Nurs Sci. 1984; 6: 42-49.
Tellington J.L. Getting in Ttouch: Understanding and influencing your horse's personality. North Pomfret, VT: Trafalgar Square, 1995.
Vormbrock J.K., Grossberg J.M. Cardiovascular effects of human-pet dog interactions. J. Behav. Med. 1988; 11: 509-517.
Wendler M.C. Holistic Nursing Practice. Frederick. 2002; 16: 51-65.

Il Tellington-touch è una tecnica di massaggio rilassante per i cani?

Alice Dal Toso

Istruttrice cinofila libero-professionista

Sintesi

Lo scopo della ricerca è stato quello di valutare l'efficacia del Tellignton-touch (TT), una tecnica di massaggio consistente in una serie di tocchi circolari delle dita utilizzata per ridurre lo stress, come tecnica di rilassamento del cane, paragonandola ad un tocco casuale.

Quattordici cani (5 maschi e 9 femmine; 39,9 ± 27,1 mesi di età) sono stati sottoposti a tre sessioni effettuate sempre nella stessa stanza da un ricercatore non qualificato come "t-touch practitioner". I cani erano lasciati liberi per 1 minuto nella stanza per esplorare l'ambiente e quindi, per 4 minuti, erano sottoposti alle seguenti manipolazioni:

1. una sessione di controllo (CT): i cani restavano nella stanza con lo sperimentatore che non interagiva con loro;
2. una manipolazione casuale (CA): i cani erano accarezzati su tutto il corpo dallo sperimentatore;
3. il TT: come suggerito da un riconosciuto Ttouch practitioner, i cani erano manipolati usando tre differenti tecniche: Ear Slides, Leopardo nebuloso e la Marcia di Noè.

Nei seguenti 4 minuti, i cani erano lasciati liberi e videoripresi per misurare la durata dei segni comportamentali di stress (girare in tondo, grattare la porta, grattarsi, guaire, leccarsi il naso, sbadigliare, scuotersi ed abbaiare).

Dopo ogni sessione era prelevata la saliva per la determinazione del cortisolo.

L'analisi statistica non ha rivelato alcuna differenza significativa tra le 3 sessioni per quanto riguarda le concentrazioni di cortisolo. Il confronto tra i dati relativi ai comportamenti di stress (somma della durata in secondi dei singoli comportamenti) ha evidenziato che essi erano più prolungati in CT (67,5 s) in confronto a CA (6,5 s; Z=-3,234; p=0,001) e TT (11,0 s; Z=-3,108; p=0,002) ma nessuna differenza è stata trovata tra CA e TT (Z=-0,874; p=0,382).

I risultati della presente ricerca sembrano indicare che il tocco gentile di una persona, a prescindere dal tipo di tocco, può avere un positivo impatto sul cane stressato. Tuttavia, mentre brevi sessioni di manipolazioni gentili hanno un immediato effetto rilassante sui cani, riscontabile dal loro comportamento, i cambiamenti fisiologici possono richiedere tempi di manipolazione più lunghi.

Questi risultati preliminari suggeriscono che TT, per lo meno quando non è praticato da una persona esperta della tecnica, ha un effetto rilassante nel cane simile a quello di un tocco gentile.