

CLINICAL RELEVANCE OF RECTAL TEMPERATURE MEASUREMENT IN CATS SHOWING MARKED SIGNS OF STRESS DURING ROUTINE VETERINARY VISITS: PILOT STUDY ON 101 CATS

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Veterinary visits can be a stressful experience for cats and the physiological fear response can result in changes in physiological parameters, including respiratory rate, blood pressure, and temperature (Quimby et al., 2009). To minimize stress, our objective was to evaluate the clinical relevance of rectal temperature measurement in healthy cats presenting with signs of marked stress during a routine veterinary appointment. Before performing a large-scale study, we designed a pilot where we aimed to validate a user-friendly Simplified Feline Stress Scale (SFSS). Stress levels were assessed by an experienced observer with three different scales: an adapted McCune scale (M.R. Kessler & Turner, 1997), an aggression scale (van Haaften et al., 2017), and the SFSS. The staff also evaluated the patient's stress levels and were asked if a change in the therapeutic plan was required based

on the temperature. The agreement with the experienced observer was better for staff with behavioral training. Staff rated stress lower than the experienced observer in cats with high stress but low aggression. Amongst calm cats, 90% were under 6 months age, suggesting that stress related to veterinary visits may develop over time. The SFSS showed perfect agreement with the McCune scale and will be used for our large-scale study. Clinical usefulness of temperature was deemed low as no therapeutic plan was modified in any cat. Our study should help veterinarians decide whether it is indicated or not to take the temperature of stressed cats presented for routine examinations.

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References

- Kessler, M. R., & Turner, D. C. (1997). Stress and adaptation of cats (*Felis silvestris catus*) housed singly, in pairs and in groups in boarding catteries. *Animal Welfare*, 12.
- Quimby, J. M., Olea-Popelka, F., & Lappin, M. R. (2009). Comparison of Digital Rectal and Microchip Transponder Thermometry in Cats. *Journal of the American Association for Laboratory Animal Science*, 48(4), 4.
- van Haaften, K. A., Forsythe, L. R. E., Stelow, E. A., & Bain, M. J. (2017). *Effects of a single preappointment dose of gabapentin on signs of stress in cats during transportation and veterinary examination*. 251(10), 7.