

COVID 19 - INDUCED STRESS IN DOGS OWNED BY ELDERLY PEOPLE

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Abstract

The study was conducted over a period of 2 months, between March and May 2020, in collaboration with 3 private clinics in Moldova region on 23 dogs of different breeds, sex and ages, paraclinically examined by hematological and biochemical tests. The inclusion criterion in the study was the ownership of all subjects by elderly persons affected by COVID 19 limitations during the emergency state in Romania. The study aimed to establish the correlation between the limited walking time in dogs and the level of stress induced by it. Each subject underwent 2 paraclinical check-ups in term of hematological testing and cortisol dosage at the end of March and beginning of May. Also, a control group of 13 dogs owned by active people was examined in a similar manner, both at the beginning of the experiment and also at the end of it. Compared with the initial values which were highly elevated ($10,89 \pm 1,66 \mu\text{g/dl}$) in all dogs owned by elderly people, the second testing revealed values comparable to normal, but still increased ($4,85 \pm 1,22 \mu\text{g/dl}$). The study demonstrates the impact of COVID 19 limitations in terms of outdoor time for dogs which produced transitional changes in cortisol levels, but also the adaptive compensatory mechanisms used to cope with modified environmental conditions.

Keywords: COVID 19, dogs, stress, cortisol
