Horse welfare: the use of Equine Appeasing Pheromone (EAP) during clipping to facilitate the adaptation process

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Horses faced different stressors during their life in contact with humans. Synthetic Equine Appeasing Pheromone (EAP) facilitates the management of different fearful situations for horses. The study investigated the effect of EAP on ethological and physiological indicators in horses during a standardized clipping. 32 competition French saddle horses (3 years) were involved in the study: blinded procedure, randomized, two parallel homogeneous groups for size, sex, age (16 Placebo/ 16 EAP). The treatment was a gel applied into the nostrils 30 minutes before the clipping. Cortisol was measured before (T0), during (T1=10 min. after the beginning), at the end (T2) and after clipping (T3=15 min. after the end of the clipping in the box of horse). An Analogical Visual Scale (AVS) about the shearer perception of the risk during clipping was evaluated. Placebo (PL) and EAP groups were compared for all parameters. Results showed not significant differences for the duration of the clipping (t Student test EAP: 3,946.37 ±680.47 s; PL: 3,949.37 ±678.12 s; ddl=30; t=-0.01; P=0.99)) and for the AVS (EAP: 7.74±2.67; PL: 7.90±2.70; ddl=30; t=-0.17; P=0.86). About the horses that passed the test in the morning results showed similar value of cortisol before clipping for the two groups ((nmol/l) T0=EAP: 110.57; PL: 115.23) and a higher level in placebo group in all other steps (T1=EAP:115.32; PL:130.91; T2=EAP:97.63; PL:125.10; T3=EAP: 93.13; PL:109.68). Significant difference between the two groups about the paw bout (EAP: 3.62±4.06; PL: 0.00±0.00; ddl=17; t=-2.98; P=0.008) and the results about snort (EAP: 0.87±1.12; PL: 3.54±7.81; ddl=17; t=0.95; P=0.35) could indicate an inhibited attitude of horses in the placebo group also taking into account the cortisol results. Clipping is not insignificant, even on horses that are reported to be confident with the event. The present study highlighted the interest to use EAP to facilitate the adaptation process, without using forbidden substances.