Abstracts - Abstract: preview

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Influence of pre-slaughter management on cortisol level in lambs

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This study aimed to verify the influence of the transport in open or closed compartments, followed by two resting periods (1 and 3 hours) for the slaughter process on the levels of cortisol as a indicative of stress level in lambs. The slaughterhouse was located 85 km away from the place of confinement and the transportation of the lambs was carried out in a cage truck type, each cage had a divider in the middle making the front without external visual access to the environment, and the back portion of the cages with visual access to the road. At the slaughterhouse, blood samples were taken from 86 lambs after the transport and before slaughter (1 or 3 hours of resting) for plasma cortisol analysis. Variables were evaluated through the PROC GLM procedure from the Statistical Analysis System ©, version 9.1.3 software. The method of transport influenced in the cortisol concentration (P<0.01), the animals transported in the closed compartment had a lower level. After the resting period in the slaughterhouse, there was a decline in the plasmatic cortisol concentration, with the animals subjected to three hours of rest presenting the lower average cortisol value (P<0.05). It can be inferred that the lambs that remained three hours in standby before slaughter had more time to recover from the stress of the transportation than those that waited just one hour. Visual access to the external environment during the transport of the lambs is a stressful factor changing the level of plasmatic cortisol, and the resting period before slaughter was effective in lowering stress, reducing the plasmatic cortisol in the lambs.