
Abstract

Objective: To investigate the effects of age at castration on the subsequent behavioural response to tail docking.  
Study design: Randomised prospective blinded experimental study. Animals Forty-five male lambs were admitted to the study at birth.  
Methods: The lambs were allocated into two groups for castration by rubber ring at 1 (1D, n = 20) or 10 (10D, n = 25) days of age. Following castration both groups of lambs were tail-docked by rubber ring at between 26 and 34 days of age. Their behavioural responses to tail docking were recorded by video for 30 minutes before (n = 11) and 30 minutes after (n = 45) tail docking. Statistical differences were tested using ANOVA with Mann-Whitney post-hoc testing.  
Results: Two data sets were removed resulting in n = 19 and = 24 at 1D and 10D, respectively. A significant increase in the incidence of active and abnormal postural behaviour was seen in both groups after tail docking. Three behaviours were significantly different (p < 0.05) between the two groups. These behaviours were rolling, standing unsteadily and the total proportion of time standing with abnormal posture. These behaviours all had greater incidence in the lambs castrated at 1D of age.  
Conclusions: Lambs castrated at 1D appeared to perceive a greater intensity of pain after subsequent tail docking than lambs castrated at 10D.  
Clinical relevance: The timing of a single noxious stimulus in young animals can affect subsequent pain perception.